

Hanjoong Jo

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8058888/publications.pdf>

Version: 2024-02-01

231
papers

15,271
citations

13865

67
h-index

20358

116
g-index

242
all docs

242
docs citations

242
times ranked

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.	2.7	533
2	Biological aspects of reactive nitrogen species. Biochimica Et Biophysica Acta - Bioenergetics, 1999, 1411, 385-400.	1.0	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.	3.2	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.	3.4	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.	3.2	392
6	Biomechanical factors in atherosclerosis: mechanisms and clinical implications. European Heart Journal, 2014, 35, 3013-3020.	2.2	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.	4.5	350
8	Caveolin-mediated regulation of signaling along the p42/44 MAP kinase cascade in vivo. FEBS Letters, 1998, 428, 205-211.	2.8	342
9	Flow-dependent regulation of endothelial nitric oxide synthase: role of protein kinases. American Journal of Physiology - Cell Physiology, 2003, 285, C499-C508.	4.6	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.	3.4	262
11	Oscillatory Shear Stress Stimulates Endothelial Production of $\text{O}_2^{\cdot -}$ from p47-dependent NAD(P)H Oxidases, Leading to Monocyte Adhesion. Journal of Biological Chemistry, 2003, 278, 47291-47298.	3.4	262
12	Flow-dependent epigenetic DNA methylation regulates endothelial gene expression and atherosclerosis. Journal of Clinical Investigation, 2014, 124, 3187-3199.	8.2	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.	3.4	245
14	Role of Flow-Sensitive microRNAs in Endothelial Dysfunction and Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, 2206-2216.	2.4	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.	4.6	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.	3.4	214
17	Altered Shear Stress Stimulates Upregulation of Endothelial VCAM-1 and ICAM-1 in a BMP-4 and TGF- β 1-Dependent Pathway. Arteriosclerosis, Thrombosis, and Vascular Biology, 2009, 29, 254-260.	2.4	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.	3.2	205

#	ARTICLE	IF	CITATIONS
19	The atypical mechanosensitive microRNA-712 derived from pre-ribosomal RNA induces endothelial inflammation and atherosclerosis. <i>Nature Communications</i> , 2013, 4, 3000.	12.8	198
20	Cell signaling by reactive nitrogen and oxygen species in atherosclerosis. <i>Free Radical Biology and Medicine</i> , 2000, 28, 1780-1794.	2.9	196
21	MicroRNA-663 upregulated by oscillatory shear stress plays a role in inflammatory response of endothelial cells. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2011, 300, H1762-H1769.	3.2	186
22	Transcriptional Profiles of Valvular and Vascular Endothelial Cells Reveal Phenotypic Differences. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2006, 26, 69-77.	2.4	172
23	Elevated cyclic stretch alters matrix remodeling in aortic valve cusps: implications for degenerative aortic valve disease. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2009, 296, H756-H764.	3.2	172
24	KLF2 and KLF4 control endothelial identity and vascular integrity. <i>JCI Insight</i> , 2017, 2, e91700.	5.0	171
25	NAD(P)H Oxidase-derived Hydrogen Peroxide Mediates Endothelial Nitric Oxide Production in Response to Angiotensin II. <i>Journal of Biological Chemistry</i> , 2002, 277, 48311-48317.	3.4	164
26	Plasma Membrane Cholesterol Is a Key Molecule in Shear Stress-dependent Activation of Extracellular Signal-regulated Kinase. <i>Journal of Biological Chemistry</i> , 1998, 273, 32304-32311.	3.4	159
27	Chronic shear induces caveolae formation and alters ERK and Akt responses in endothelial cells. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2003, 285, H1113-H1122.	3.2	159
28	Mechanical Activation of Hypoxia-Inducible Factor 1 α Drives Endothelial Dysfunction at Atheroprone Sites. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2017, 37, 2087-2101.	2.4	154
29	The NADPH oxidase Nox4 has anti-atherosclerotic functions. <i>European Heart Journal</i> , 2015, 36, 3447-3456.	2.2	150
30	Multifunctional Nanoparticles Facilitate Molecular Targeting and miRNA Delivery to Inhibit Atherosclerosis in ApoE ^{-/-} Mice. <i>ACS Nano</i> , 2015, 9, 8885-8897.	14.6	150
31	Shear stress and plaque development. <i>Expert Review of Cardiovascular Therapy</i> , 2010, 8, 545-556.	1.5	142
32	Elevated Cyclic Stretch Induces Aortic Valve Calcification in a Bone Morphogenic Protein-Dependent Manner. <i>American Journal of Pathology</i> , 2010, 177, 49-57.	3.8	138
33	Discovery of novel mechanosensitive genes in vivo using mouse carotid artery endothelium exposed to disturbed flow. <i>Blood</i> , 2010, 116, e66-e73.	1.4	136
34	Fluid Mechanics, Arterial Disease, and Gene Expression. <i>Annual Review of Fluid Mechanics</i> , 2014, 46, 591-614.	25.0	134
35	Activation of Mitogen-activated Protein Kinase Pathways by Cyclic GMP and Cyclic GMP-dependent Protein Kinase in Contractile Vascular Smooth Muscle Cells. <i>Journal of Biological Chemistry</i> , 1999, 274, 34301-34309.	3.4	131
36	Caveolin-1 regulates shear stress-dependent activation of extracellular signal-regulated kinase. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2000, 278, H1285-H1293.	3.2	122

#	ARTICLE	IF	CITATIONS
37	Simulated microgravity using the Random Positioning Machine inhibits differentiation and alters gene expression profiles of 2T3 preosteoblasts. <i>American Journal of Physiology - Cell Physiology</i> , 2005, 288, C1211-C1221.	4.6	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. <i>Circulation</i> , 2007, 116, 1258-1266.	1.6	120
39	Nitric Oxide-Dependent Induction of Glutathione Synthesis through Increased Expression of β -Glutamylcysteine Synthetase. <i>Archives of Biochemistry and Biophysics</i> , 1998, 358, 74-82.	3.0	118
40	Bone Morphogenic Protein-4 Induces Hypertension in Mice. <i>Circulation</i> , 2006, 113, 2818-2825.	1.6	117
41	Reactive oxygen species-selective regulation of aortic inflammatory gene expression in Type 2 diabetes. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007, 292, H2073-H2082.	3.2	117
42	The induction of GSH synthesis by nanomolar concentrations of NO in endothelial cells: a role for β -glutamylcysteine synthetase and β -glutamyl transpeptidase. <i>FEBS Letters</i> , 1999, 448, 292-296.	2.8	115
43	Mechanisms of Cell Signaling by Nitric Oxide and Peroxynitrite: From Mitochondria to MAP Kinases. <i>Antioxidants and Redox Signaling</i> , 2001, 3, 215-229.	5.4	112
44	An Ex Vivo Study of the Biological Properties of Porcine Aortic Valves in Response to Circumferential Cyclic Stretch. <i>Annals of Biomedical Engineering</i> , 2006, 34, 1655-1665.	2.5	110
45	Endothelial Reprogramming by Disturbed Flow Revealed by Single-Cell RNA and Chromatin Accessibility Study. <i>Cell Reports</i> , 2020, 33, 108491.	6.4	109
46	Peroxiredoxin 2 Deficiency Exacerbates Atherosclerosis in Apolipoprotein E ^{-/-} Deficient Mice. <i>Circulation Research</i> , 2011, 109, 739-749.	4.5	107
47	Expression of cathepsin K is regulated by shear stress in cultured endothelial cells and is increased in endothelium in human atherosclerosis. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007, 292, H1479-H1486.	3.2	104
48	Expression of CYP1A1 and CYP1B1 in human endothelial cells: regulation by fluid shear stress. <i>Cardiovascular Research</i> , 2009, 81, 669-677.	3.8	98
49	Discovery of shear- and side-specific mRNAs and miRNAs in human aortic valvular endothelial cells. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2011, 301, H856-H867.	3.2	96
50	Endothelial albumin permeability is shear dependent, time dependent, and reversible. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1991, 260, H1992-H1996.	3.2	94
51	Role of NADPH Oxidases in Disturbed Flow- and BMP4- Induced Inflammation and Atherosclerosis. <i>Antioxidants and Redox Signaling</i> , 2006, 8, 1609-1619.	5.4	92
52	Protein kinase B/Akt activates c-Jun NH ₂ -terminal kinase by increasing NO production in response to shear stress. <i>Journal of Applied Physiology</i> , 2001, 91, 1574-1581.	2.5	91
53	Aortic Valve: Mechanical Environment and Mechanobiology. <i>Annals of Biomedical Engineering</i> , 2013, 41, 1331-1346.	2.5	91
54	Prevention of Abdominal Aortic Aneurysm by Anti μ -MicroRNA-712 or Anti μ -MicroRNA-205 in Angiotensin II μ -Infused Mice. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2014, 34, 1412-1421.	2.4	90

#	ARTICLE	IF	CITATIONS
55	Flow-Dependent Epigenetic DNA Methylation in Endothelial Gene Expression and Atherosclerosis. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2015, 35, 1562-1569.	2.4	89
56	Endothelial NO synthase phosphorylated at SER635 produces NO without requiring intracellular calcium increase. <i>Free Radical Biology and Medicine</i> , 2003, 35, 729-741.	2.9	86
57	Identification of mechanosensitive genes in osteoblasts by comparative microarray studies using the rotating wall vessel and the random positioning machine. <i>Journal of Cellular Biochemistry</i> , 2007, 101, 587-599.	2.6	85
58	Role of flow-sensitive microRNAs and long noncoding RNAs in vascular dysfunction and atherosclerosis. <i>Vascular Pharmacology</i> , 2019, 114, 76-92.	2.1	84
59	Evidence for peroxynitrite as a signaling molecule in flow-dependent activation of c-Jun NH2-terminal kinase. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1999, 277, H1647-H1653.	3.2	81
60	Laminar Shear Stress Up-regulates Peroxiredoxins (PRX) in Endothelial Cells. <i>Journal of Biological Chemistry</i> , 2008, 283, 1622-1627.	3.4	81
61	Anti-Inflammatory and Antiatherogenic Role of BMP Receptor II in Endothelial Cells. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2013, 33, 1350-1359.	2.4	81
62	HuR regulates the expression of stress-sensitive genes and mediates inflammatory response in human umbilical vein endothelial cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 6858-6863.	7.1	80
63	Recent advances in nanomaterials for therapy and diagnosis for atherosclerosis. <i>Advanced Drug Delivery Reviews</i> , 2021, 170, 142-199.	13.7	80
64	Mechanosensitive PPAP2B Regulates Endothelial Responses to Atherorelevant Hemodynamic Forces. <i>Circulation Research</i> , 2015, 117, e41-e53.	4.5	75
65	Laminar Shear Inhibits Tubule Formation and Migration of Endothelial Cells by an Angiopoietin-2-Dependent Mechanism. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2007, 27, 2150-2156.	2.4	74
66	Target accessibility and signal specificity in live-cell detection of BMP-4 mRNA using molecular beacons. <i>Nucleic Acids Research</i> , 2008, 36, e30-e30.	14.5	74
67	The effect of varying albumin concentration and hydrostatic pressure on hydraulic conductivity and albumin permeability of cultured endothelial monolayers. <i>Microvascular Research</i> , 1991, 41, 390-407.	2.5	73
68	Simulated Microgravity and 3D Culture Enhance Induction, Viability, Proliferation and Differentiation of Cardiac Progenitors from Human Pluripotent Stem Cells. <i>Scientific Reports</i> , 2016, 6, 30956.	3.3	73
69	Accelerated atherosclerosis development in C57Bl6 mice by overexpressing AAV-mediated PCSK9 and partial carotid ligation. <i>Laboratory Investigation</i> , 2017, 97, 935-945.	3.7	72
70	Caveolin-1 Knockout Mice Have Increased Bone Size and Stiffness. <i>Journal of Bone and Mineral Research</i> , 2007, 22, 1408-1418.	2.8	70
71	Animal, <i>In Vitro</i> , and <i>Ex Vivo</i> Models of Flow-Dependent Atherosclerosis: Role of Oxidative Stress. <i>Antioxidants and Redox Signaling</i> , 2011, 15, 1433-1448.	5.4	68
72	Piperlongumine inhibits atherosclerotic plaque formation and vascular smooth muscle cell proliferation by suppressing PDGF receptor signaling. <i>Biochemical and Biophysical Research Communications</i> , 2012, 427, 349-354.	2.1	68

#	ARTICLE	IF	CITATIONS
73	Laminar Shear Stress Inhibits Cathepsin L Activity in Endothelial Cells. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2006, 26, 1784-1790.	2.4	67
74	Design of an Ex Vivo Culture System to Investigate the Effects of Shear Stress on Cardiovascular Tissue. <i>Journal of Biomechanical Engineering</i> , 2008, 130, 035001.	1.3	67
75	Preferential Activation of SMAD1/5/8 on the Fibrosa Endothelium in Calcified Human Aortic Valves - Association with Low BMP Antagonists and SMAD6. <i>PLoS ONE</i> , 2011, 6, e20969.	2.5	67
76	Affinity-Driven Design of Cargo-Switching Nanoparticles to Leverage a Cholesterol-Rich Microenvironment for Atherosclerosis Therapy. <i>ACS Nano</i> , 2020, 14, 6519-6531.	14.6	67
77	Role of Noncoding RNAs in the Pathogenesis of Abdominal Aortic Aneurysm. <i>Circulation Research</i> , 2019, 124, 619-630.	4.5	66
78	Differential proinflammatory and prooxidant effects of bone morphogenetic protein-4 in coronary and pulmonary arterial endothelial cells. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2008, 295, H569-H577.	3.2	64
79	Effects of pyrrolidine dithiocarbamate on endothelial cells: protection against oxidative stress. <i>Free Radical Biology and Medicine</i> , 1999, 26, 1138-1145.	2.9	62
80	Vascular Semaphorin 7A Upregulation by Disturbed Flow Promotes Atherosclerosis Through Endothelial β_1 Integrin. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2018, 38, 335-343.	2.4	62
81	The novel coronary artery disease risk gene <i>JCAD/KIAA1462</i> promotes endothelial dysfunction and atherosclerosis. <i>European Heart Journal</i> , 2019, 40, 2398-2408.	2.2	60
82	Coordinated regulation of endothelial nitric oxide synthase activity by phosphorylation and subcellular localization. <i>Free Radical Biology and Medicine</i> , 2006, 41, 144-153.	2.9	56
83	Angiopoietin-2 Stimulates Blood Flow Recovery After Femoral Artery Occlusion by Inducing Inflammation and Arteriogenesis. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2008, 28, 1989-1995.	2.4	56
84	The role of epigenetics in the endothelial cell shear stress response and atherosclerosis. <i>International Journal of Biochemistry and Cell Biology</i> , 2015, 67, 167-176.	2.8	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-1 α (Hypoxia-Inducible Factor-1 α) Pathway in Endothelial Cells. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2019, 39, 467-481.	2.4	54
86	Phosphatidylinositol 3-kinase β mediates shear stress-dependent activation of JNK in endothelial cells. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1998, 275, H1898-H1904.	3.2	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. <i>Journal of Visualized Experiments</i> , 2010, , .	0.3	53
88	The role of endothelial mechanosensitive genes in atherosclerosis and omics approaches. <i>Archives of Biochemistry and Biophysics</i> , 2016, 591, 111-131.	3.0	53
89	Downregulation of Bone Morphogenetic Protein 4 Expression in Coronary Arterial Endothelial Cells. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2007, 27, 776-782.	2.4	51
90	GTP Cyclohydrolase I Phosphorylation and Interaction With GTP Cyclohydrolase Feedback Regulatory Protein Provide Novel Regulation of Endothelial Tetrahydrobiopterin and Nitric Oxide. <i>Circulation Research</i> , 2010, 106, 328-336.	4.5	51

#	ARTICLE	IF	CITATIONS
91	Early determinants of H ₂ O ₂ -induced endothelial dysfunction. <i>Free Radical Biology and Medicine</i> , 2006, 41, 810-817.	2.9	50
92	Tetrahydrobiopterin Deficiency and Nitric Oxide Synthase Uncoupling Contribute to Atherosclerosis Induced by Disturbed Flow. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2011, 31, 1547-1554.	2.4	50
93	Embryonic Stem Cell-Derived Endothelial Cells May Lack Complete Functional Maturation in vitro. <i>Journal of Vascular Research</i> , 2006, 43, 411-421.	1.4	49
94	The Effects of Combined Cyclic Stretch and Pressure on the Aortic Valve Interstitial Cell Phenotype. <i>Annals of Biomedical Engineering</i> , 2011, 39, 1654-1667.	2.5	49
95	The interplay of nitric oxide and peroxynitrite with signal transduction pathways: Implications for disease. <i>Seminars in Perinatology</i> , 1997, 21, 351-366.	2.5	48
96	Disturbed flow induces systemic changes in metabolites in mouse plasma: a metabolomics study using ApoE ^{-/-} mice with partial carotid ligation. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2015, 308, R62-R72.	1.8	48
97	Disturbed Flow Promotes Arterial Stiffening Through Thrombospondin-1. <i>Circulation</i> , 2017, 136, 1217-1232.	1.6	48
98	Flow-dependent expression of ectonucleotide tri(di)phosphohydrolase-1 and suppression of atherosclerosis. <i>Journal of Clinical Investigation</i> , 2015, 125, 3027-3036.	8.2	47
99	Plasma membrane requirements for 1 α ,25(OH) ₂ D ₃ dependent PKC signaling in chondrocytes and osteoblasts. <i>Steroids</i> , 2006, 71, 286-290.	1.8	46
100	Angiotensin II induces DNA damage via AT ₁ receptor and NADPH oxidase isoform Nox4. <i>Mutagenesis</i> , 2012, 27, 673-681.	2.6	46
101	Altered Amygdala Resting-State Functional Connectivity and Hemispheric Asymmetry in Patients With Social Anxiety Disorder. <i>Frontiers in Psychiatry</i> , 2018, 9, 164.	2.6	45
102	Low magnitude and high frequency mechanical loading prevents decreased bone formation responses of 2T3 preosteoblasts. <i>Journal of Cellular Biochemistry</i> , 2009, 106, 306-316.	2.6	44
103	Oxidized phospholipids regulate amino acid metabolism through MTHFD2 to facilitate nucleotide release in endothelial cells. <i>Nature Communications</i> , 2018, 9, 2292.	12.8	44
104	Identification of side- and shear-dependent microRNAs regulating porcine aortic valve pathogenesis. <i>Scientific Reports</i> , 2016, 6, 25397.	3.3	43
105	3D Imaging and Quantitative Analysis of Vascular Networks: A Comparison of Ultramicroscopy and Micro-Computed Tomography. <i>Theranostics</i> , 2018, 8, 2117-2133.	10.0	41
106	Regulation of Growth Plate Chondrocytes by 1,25-Dihydroxyvitamin D ₃ Requires Caveolae and Caveolin-1. <i>Journal of Bone and Mineral Research</i> , 2006, 21, 1637-1647.	2.8	40
107	Shear-Sensitive Genes in Aortic Valve Endothelium. <i>Antioxidants and Redox Signaling</i> , 2016, 25, 401-414.	5.4	40
108	Cyclic pressure and shear stress regulate matrix metalloproteinases and cathepsin activity in porcine aortic valves. <i>Journal of Heart Valve Disease</i> , 2006, 15, 622-9.	0.5	40

#	ARTICLE	IF	CITATIONS
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.	3.2	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.	3.2	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.	7.1	39
112	Nitric oxide, free radicals and cell signalling in cardiovascular disease. Biochemical Society Transactions, 1997, 25, 925-929.	3.4	38
113	Dynamic Immune Cell Accumulation During Flow-Induced Atherogenesis in Mouse Carotid Artery. Arteriosclerosis, Thrombosis, and Vascular Biology, 2012, 32, 623-632.	2.4	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.	2.4	38
115	Delivery of Anti-microRNA-712 to Inflamed Endothelial Cells Using Poly(ϵ -amino ester) Nanoparticles Conjugated with VCAM-1 Targeting Peptide. Advanced Healthcare Materials, 2021, 10, e2001894.	7.6	38
116	Mechanical forces regulate endothelial-to-mesenchymal transition and atherosclerosis via an Alk5-Shc mechanotransduction pathway. Science Advances, 2021, 7, .	10.3	37
117	$\text{I}\kappa\text{B}\alpha$ -dependent regulation of low-shear flow-induced NF- κB activity: role of nitric oxide. American Journal of Physiology - Cell Physiology, 2003, 284, C1039-C1047.	4.6	36
118	The role of the vascular dendritic cell network in atherosclerosis. American Journal of Physiology - Cell Physiology, 2013, 305, C1-C21.	4.6	36
119	Tyrosine-Phosphorylated Calmodulin Has Reduced Biological Activity. Archives of Biochemistry and Biophysics, 1994, 315, 119-126.	3.0	34
120	Ascorbic acid synthesis due to l-gulonolactone oxidase expression enhances NO production in endothelial cells. Biochemical and Biophysical Research Communications, 2006, 345, 1657-1662.	2.1	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.	2.5	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.	4.5	32
124	Mechanosensitive microRNA-181b Regulates Aortic Valve Endothelial Matrix Degradation by Targeting TIMP3. Cardiovascular Engineering and Technology, 2018, 9, 141-150.	1.6	32
125	An improved method to measure nitrate/nitrite with an NO-selective electrochemical sensor. Nitric Oxide - Biology and Chemistry, 2007, 16, 306-312.	2.7	30
126	Differences in valvular and vascular cell responses to strain in osteogenic media. Biomaterials, 2011, 32, 2885-2893.	11.4	30

#	ARTICLE	IF	CITATIONS
127	ZBTB46 is a shear-sensitive transcription factor inhibiting endothelial cell proliferation via gene expression regulation of cell cycle proteins. <i>Laboratory Investigation</i> , 2019, 99, 305-318.	3.7	30
128	8-Hydroxy-2-deoxyguanosine prevents plaque formation and inhibits vascular smooth muscle cell activation through Rac1 inactivation. <i>Free Radical Biology and Medicine</i> , 2012, 53, 109-121.	2.9	29
129	Mechanical Inhibition of RANKL Expression Is Regulated by H-Ras-GTPase. <i>Journal of Biological Chemistry</i> , 2006, 281, 1412-1418.	3.4	28
130	High glucose induced NF- κ B DNA-binding activity in HAEC is maintained under low shear stress but inhibited under high shear stress: role of nitric oxide. <i>Atherosclerosis</i> , 2003, 171, 225-234.	0.8	27
131	Reversible Glutathiolation of Caspase-3 by Glutaredoxin as a Novel Redox Signaling Mechanism in Tumor Necrosis Factor- α -Induced Cell Death. <i>Circulation Research</i> , 2007, 100, 152-154.	4.5	27
132	Optimization of Isolation and Functional Characterization of Primary Murine Aortic Endothelial Cells. <i>Endothelium: Journal of Endothelial Cell Research</i> , 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. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2013, 305, H484-H493.	3.2	26
134	Identification, partial purification, and characterization of two guanosine triphosphate-binding proteins associated with insulin receptors.. <i>Endocrinology</i> , 1992, 131, 2855-2862.	2.8	25
135	Vascular Injury Involves the Overoxidation of Peroxiredoxin Type II and Is Recovered by the Peroxiredoxin Activity Mimetic That Induces Reendothelialization. <i>Circulation</i> , 2013, 128, 834-844.	1.6	25
136	Flow-dependent regulation of genome-wide mRNA and microRNA expression in endothelial cells in vivo. <i>Scientific Data</i> , 2014, 1, 140039.	5.3	25
137	Disturbed Flow Enhances Inflammatory Signaling and Atherogenesis by Increasing Thioredoxin-1 Level in Endothelial Cell Nuclei. <i>PLoS ONE</i> , 2014, 9, e108346.	2.5	25
138	X-linked inhibitor of apoptosis protein controls α 5 β 1-integrin-mediated cell adhesion and migration. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2010, 299, H300-H309.	3.2	24
139	The bone morphogenic protein inhibitor, noggin, reduces glycemia and vascular inflammation in <i>db/db</i> mice. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2013, 305, H747-H755.	3.2	24
140	Deep transcriptomic profiling reveals the similarity between endothelial cells cultured under static and oscillatory shear stress conditions. <i>Physiological Genomics</i> , 2016, 48, 660-666.	2.3	23
141	An insulin receptor peptide (1135-1156) stimulates guanosine 5'-[γ -thio]triphosphate binding to the 67 kDa G-protein associated with the insulin receptor. <i>Biochemical Journal</i> , 1993, 294, 19-24.	3.7	21
142	Serum BMP-4 levels in relation to arterial stiffness and carotid atherosclerosis in patients with Type 2 diabetes. <i>Biomarkers in Medicine</i> , 2011, 5, 827-835.	1.4	21
143	Recent Progress in in vitro Models for Atherosclerosis Studies. <i>Frontiers in Cardiovascular Medicine</i> , 2021, 8, 790529.	2.4	21
144	Laminar shear stress inhibits lipid peroxidation induced by high glucose plus arachidonic acid in endothelial cells. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2008, 295, H1966-H1973.	3.2	20

#	ARTICLE	IF	CITATIONS
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.	3.2	20
146	Caveolin-1 is transiently dephosphorylated by shear stress-activated protein tyrosine phosphatase mu. Biochemical and Biophysical Research Communications, 2006, 339, 737-741.	2.1	19
147	Delivery of siRNA to Endothelial Cells In Vivo Using Lysine/Histidine Oligopeptide-Modified Poly(β -amino) Tj ETQq1 1 0.784314 rgBT / OM	1.6	19
148	Stable flow-induced expression of KLK10 inhibits endothelial inflammation and atherosclerosis. ELife, 2022, 11, .	6.0	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.	4.6	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.	4.6	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.	3.1	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.	3.3	17
153	Disturbed Flow Induces Atherosclerosis by Annexin A2-Mediated Integrin Activation. Circulation Research, 2020, 127, 1091-1093.	4.5	17
154	Targeted Intravenous Nanoparticle Delivery: Role of Flow and Endothelial Glycocalyx Integrity. Annals of Biomedical Engineering, 2020, 48, 1941-1954.	2.5	17
155	Strain Magnitude-Dependent Calcific Marker Expression in Valvular and Vascular Cells. Cells Tissues Organs, 2013, 197, 372-383.	2.3	16
156	Targeted Delivery of Anti- α -miR-12 by VCAM1-Binding Au Nanospheres for Atherosclerosis Therapy. ChemNanoMat, 2016, 2, 400-406.	2.8	16
157	Conserved Gene Microsynteny Unveils Functional Interaction Between Protein Disulfide Isomerase and Rho Guanine-Dissociation Inhibitor Families. Scientific Reports, 2017, 7, 17262.	3.3	16
158	Hypoxia inducible factor 1 α inhibitor PX-478 reduces atherosclerosis in mice. Atherosclerosis, 2022, 344, 20-30.	0.8	16
159	Redox Going with Vascular Shear Stress. Antioxidants and Redox Signaling, 2011, 15, 1367-1368.	5.4	15
160	Disturbed flow: p53 SUMOylation in the turnover of endothelial cells. Journal of Cell Biology, 2011, 193, 805-807.	5.2	15
161	Omics-based approaches to understand mechanosensitive endothelial biology and atherosclerosis. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2016, 8, 378-401.	6.6	15
162	Maturing EPCs into endothelial cells: may the force be with the EPCs. Focus on α -Fluid shear stress induces differentiation of circulating phenotype endothelial progenitor cells. American Journal of Physiology - Cell Physiology, 2012, 303, C589-C591.	4.6	14

#	ARTICLE	IF	CITATIONS
163	Angiotensin type I receptor blockade in conjunction with enhanced Akt activation restores coronary collateral growth in the metabolic syndrome. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2011, 300, H1938-H1949.	3.2	13
164	Deletion of NoxO1 limits atherosclerosis development in female mice. <i>Redox Biology</i> , 2020, 37, 101713.	9.0	13
165	Combined LXR and RXR Agonist Therapy Increases ABCA1 Protein Expression and Enhances ApoAI-Mediated Cholesterol Efflux in Cultured Endothelial Cells. <i>Metabolites</i> , 2021, 11, 640.	2.9	13
166	miR-214 is Stretch-Sensitive in Aortic Valve and Inhibits Aortic Valve Calcification. <i>Annals of Biomedical Engineering</i> , 2019, 47, 1106-1115.	2.5	12
167	Micro-CT Technique Is Well Suited for Documentation of Remodeling Processes in Murine Carotid Arteries. <i>PLoS ONE</i> , 2015, 10, e0130374.	2.5	11
168	Insulin Stimulates Association of a 41-kDa G-Protein (GIR41) with the Insulin Receptor. <i>Biochemical and Biophysical Research Communications</i> , 1993, 196, 99-106.	2.1	10
169	Systems Analysis of the Role of Bone Morphogenic Protein 4 in Endothelial Inflammation. <i>Annals of Biomedical Engineering</i> , 2010, 38, 291-307.	2.5	10
170	Intimal cushions and endothelial nuclear elongation around mouse aortic branches and their spatial correspondence with patterns of lipid deposition. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2010, 298, H536-H544.	3.2	10
171	The flagellin-TLR5-Nox4 axis promotes the migration of smooth muscle cells in atherosclerosis. <i>Experimental and Molecular Medicine</i> , 2019, 51, 1-13.	7.7	10
172	Conditional Deoxyribozymeâ€Nanoparticle Conjugates for miRNA-Triggered Gene Regulation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 37851-37861.	8.0	10
173	Identification, partial purification, and characterization of two guanosine triphosphate-binding proteins associated with insulin receptors. <i>Endocrinology</i> , 1992, 131, 2855-2862.	2.8	10
174	Targeting mechanosensitive endothelial TXNDC5 to stabilize eNOS and reduce atherosclerosis in vivo. <i>Science Advances</i> , 2022, 8, eabl8096.	10.3	10
175	Vascular Proteomics Reveal Novel Proteins Involved in SMC Phenotypic Change: OLR1 as a SMC Receptor Regulating Proliferation and Inflammatory Response. <i>PLoS ONE</i> , 2015, 10, e0133845.	2.5	8
176	High glucose and palmitate increases bone morphogenic protein 4 expression in human endothelial cells. <i>Korean Journal of Physiology and Pharmacology</i> , 2016, 20, 169.	1.2	8
177	Conditional Antisense Oligonucleotides Triggered by miRNA. <i>ACS Chemical Biology</i> , 2021, 16, 2255-2267.	3.4	8
178	Hemodynamic Features in Stenosed Coronary Arteries: CFD Analysis Based on Histological Images. <i>Journal of Applied Mathematics</i> , 2013, 2013, 1-11.	0.9	7
179	Functional screening of mammalian mechanosensitive genes using <i>Drosophila</i> RNAi libraryâ€Smarcd3/Bap60 is a mechanosensitive pro-inflammatory gene. <i>Scientific Reports</i> , 2016, 6, 36461.	3.3	7
180	Tyrosine phosphorylation of phosphatase inhibitor 2. <i>Journal of Cellular Biochemistry</i> , 1995, 57, 415-422.	2.6	6

#	ARTICLE	IF	CITATIONS
181	Emerging Role of IGF-1R in Stretch-Induced Neointimal Hyperplasia in Venous Grafts. Arteriosclerosis, Thrombosis, and Vascular Biology, 2007, 27, 1679-1681.	2.4	6
182	Detection of Low Levels of Nitric Oxide Using an Electrochemical Sensor. Methods in Molecular Biology, 2011, 704, 81-89.	0.9	6
183	Special issue on mechanobiology and diseases. Biomedical Engineering Letters, 2015, 5, 159-161.	4.1	6
184	Focal Adhesion Kinase Activity and Localization is Critical for TNF- α -Induced Nuclear Factor- κ B Activation. Inflammation, 2021, 44, 1130-1144.	3.8	6
185	Endothelial Poldip2 regulates sepsis-induced lung injury via Rho pathway activation. Cardiovascular Research, 2022, 118, 2506-2518.	3.8	6
186	[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.	1.0	5
187	Biomechanical regulation of endothelial function in atherosclerosis. , 2021, , 3-47.		5
188	Atorvastatin and blood flow regulate expression of distinctive sets of genes in mouse carotid artery endothelium. Current Topics in Membranes, 2021, 87, 97-130.	0.9	4
189	Novel Animal Models of Atherosclerosis. Biomedical Engineering Letters, 2015, 5, 181-187.	4.1	3
190	Is Endothelial Dysfunction a Therapeutic Target for Peripheral Artery Disease?: PRDM16 is going out on a limb. Circulation Research, 2021, 129, 78-80.	4.5	3
191	Hemodynamics and Mechanobiology of Endothelium. , 2010, , .		3
192	Shear- and Side-dependent microRNAs and Messenger RNAs in Aortic Valvular Endothelium. , 2012, , .		3
193	Isolation of Endothelial Cells from the Lumen of Mouse Carotid Arteries for Single-cell Multi-omics Experiments. Journal of Visualized Experiments, 2021, , .	0.3	3
194	Characterization of Poldip2 knockout mice: Avoiding incorrect gene targeting. PLoS ONE, 2021, 16, e0247261.	2.5	3
195	Spatial control of robust transgene expression in mouse artery endothelium under ultrasound guidance. Signal Transduction and Targeted Therapy, 2022, 7, .	17.1	3
196	Identification of Candidate MicroRNA as Pathological Markers of Pediatric Heart Transplant Rejection. Journal of Heart and Lung Transplantation, 2015, 34, S162.	0.6	2
197	Editorial: Special Issue on Heart Valve Mechanobiology. Cardiovascular Engineering and Technology, 2018, 9, 121-125.	1.6	2
198	Hemodynamics and Mechanobiology of Aortic Valve Calcification. Biosystems and Biorobotics, 2016, , 237-261.	0.3	2

#	ARTICLE	IF	CITATIONS
199	Altered Shear Stress Stimulates Upregulation of Endothelial VCAM-1 and ICAM-1 in a BMP-4- and TGF- β 1-Dependent Pathway. , 2009, , .		2
200	Low and Unsteady Shear Stresses Upregulate Calcification Response of the Aortic Valve Leaflets. , 2011, , .		2
201	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
202	Fibronectinâ€dependent cell adhesion is required for shearâ€dependent ERK activation. Korean Journal of Biological Sciences, 2004, 8, 27-32.	0.1	1
203	The atypical mechanosensitive microrna-712 derived from pre-ribosomal RNA induces endothelial inflammation and atherosclerosis. Atherosclerosis, 2014, 235, e40-e41.	0.8	1
204	Special Issue on Professor John M. Tarbellâ€™s Contribution to Cardiovascular Engineering. Cardiovascular Engineering and Technology, 2021, 12, 1-8.	1.6	1
205	Very late vasomotor responses and gene expression with bioresorbable scaffolds and metallic drugâ€eluting stents. Catheterization and Cardiovascular Interventions, 2021, 98, 723-732.	1.7	1
206	Calcification of Aortic Valve leaflets is Shear Dependent and Side-specific. , 2012, , .		1
207	Oscillatory shear stress promotes endothelial cell migration and angiogenesis. FASEB Journal, 2006, 20, A289.	0.5	1
208	Laminar Shear Stress Upâ€regulates Endothelial CD73 Expression by Activating Calmodulinâ€dependent Kinase Kinase. FASEB Journal, 2010, 24, 784.16.	0.5	1
209	Identification of target proteins of shear stressâ€related miRNAs in endothelial cells. FASEB Journal, 2012, 26, 776.6.	0.5	1
210	Shear stress regulates endothelial NO synthase (eNOS) by the protein kinase A (PKA)-dependent mechanisms. , 0, , .		1
211	NITRIC OXIDE, FREE RADICALS AND CELL SIGNALLING IN CARDIOVASCULAR DISEASE. Biochemical Society Transactions, 1997, 25, 384S-384S.	3.4	0
212	OSCILLATORY SHEAR STRESS (OS) UPREGULATES CATHEPSIN EXPRESSION WHILE INHIBITING CYSTATIN C EXPRESSION IN ENDOTHELIAL CELLS (EC) - IMPLICATION IN ATHEROSCLEROSIS. Cardiovascular Pathology, 2004, 13, 155.	1.6	0
213	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.	0.4	0
214	Differential Osteogenic Marker Expression by Human Vascular and Valvular Cells in Tissue-Engineered Collagen Constructs. , 2010, , .		0
215	Peroxiredoxins as Mechanosensitive Antioxidants in a Subcellularâ€specific Manner. FASEB Journal, 2006, 20, A1453.	0.5	0
216	Laminar shear stress inhibits cathepsin L activity in endothelial cells (EC). FASEB Journal, 2006, 20, .	0.5	0

#	ARTICLE	IF	CITATIONS
217	Low Magnitude and High Frequency Vibration Prevents Simulated Microgravity-Induced Decrease in a Bone Formation Response in Osteoblasts. , 2006, , .		0
218	Live Cell Detection of Specific Messenger RNA for Molecular Analysis of Plaque Formation. , 2007, , .		0
219	Safety characteristics analysis of Korean standard communication protocol for railway signalling. WIT Transactions on the Built Environment, 2007, , .	0.0	0
220	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.	0.5	0
221	Mechanical loading prevents decreased bone formation responses of osteoblasts by a bone morphogenic proteinâ€dependent mechanism. FASEB Journal, 2008, 22, 774.3.	0.5	0
222	Peroxiredoxin 1 is Upregulated by Laminar Shear Stress via Nrf2 Transcription Factor. FASEB Journal, 2008, 22, 964.5.	0.5	0
223	Angiopoietinâ€2 inhibition impairs blood flow recovery during hindlimb ischemia. FASEB Journal, 2008, 22, 746.5.	0.5	0
224	NO negatively regulates cell surface expression of CD73 in sheared endothelial cells. FASEB Journal, 2010, 24, 784.14.	0.5	0
225	Oral Tetrahydrobiopterin Treatment Prevents Accelerated Atherosclerosis Caused by Oscillatory Shear Stress. FASEB Journal, 2010, 24, lb565.	0.5	0
226	Intimal Thickening Sourced From Low Wall Shear Stress in Human Left Coronary Artery Was Observed by Optical Coherence Tomography. , 2011, , .		0
227	Discovery of Side- and Shear-Dependent miRNAs and mRNAs in Human Aortic Valvular Endothelial Cells. , 2011, , .		0
228	Abstract 40: Disturbed Flow Alters Genomewide DNA Methylation Patterns, Regulating Endothelial Gene Expression and Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, .	2.4	0
229	Disturbed Blood Flow induces Arterial Stiffening Through Thrombospondinâ€1. FASEB Journal, 2018, 32, 143.1.	0.5	0
230	Role of Biomechanical Stress and Mechanosensitive miRNAs in Calcific Aortic Valve Disease. Contemporary Cardiology, 2020, , 117-135.	0.1	0
231	Abstract 17221: Stable Flow-Induced Expression of KLK10 Inhibits Endothelial Inflammation and Atherosclerosis. Circulation, 2020, 142, .	1.6	0