

# Laminar Shear Stress

Arteriosclerosis, Thrombosis, and Vascular Biology  
18, 677-685

DOI: 10.1161/01.atv.18.5.677

Citation Report

#	ARTICLE	IF	CITATIONS
1	Endothelial Dysfunction, Hemodynamic Forces, and Atherosclerosis. Thrombosis and Haemostasis, 1999, 82, 722-726.	3.4	93
2	Endothelin receptor antagonists: novel agents for the treatment of hypertension?. Expert Opinion on Investigational Drugs, 1999, 8, 1807-1821.	4.1	11
3	Vascular Endothelial Cells Respond to Spatial Gradients in Fluid Shear Stress by Enhanced Activation of Transcription Factors. Arteriosclerosis, Thrombosis, and Vascular Biology, 1999, 19, 1825-1834.	2.4	308
4	Protection by Shear Stress From Collar-Induced Intimal Thickening. Arteriosclerosis, Thrombosis, and Vascular Biology, 1999, 19, 2609-2614.	2.4	23
5	Cyclic Strain Stress-induced Mitogen-activated Protein Kinase (MAPK) Phosphatase 1 Expression in Vascular Smooth Muscle Cells Is Regulated by Ras/Rac-MAPK Pathways. Journal of Biological Chemistry, 1999, 274, 25273-25280.	3.4	181
6	Shear Stress-mediated Extracellular Signal-regulated Kinase Activation Is Regulated by Sodium in Endothelial Cells. Journal of Biological Chemistry, 1999, 274, 20144-20150.	3.4	59
7	Delivery and Expression of Fluid Shear Stress-Inducible Promoters to the Vessel Wall: Applications for Cardiovascular Gene Therapy. Human Gene Therapy, 1999, 10, 3031-3044.	2.7	35
9	Ultrastructural identification of caveolae and immunocytochemical as well as biochemical detection of caveolin in chondrocytes. The Histochemical Journal, 1999, 31, 315-320.	0.6	7
10	Endothelin and its antagonists in hypertension: Can we foresee the future?. Current Hypertension Reports, 1999, 1, 69-78.	3.5	3
11	Antiatherosclerotic activity of drugs in relation to nitric oxide function. European Journal of Pharmacology, 1999, 375, 157-176.	3.5	30
12	Blood flow and vascular gene expression: fluid shear stress as a modulator of endothelial phenotype. Trends in Molecular Medicine, 1999, 5, 40-46.	2.6	353
13	Hemodynamic Shear Stress and Its Role in Atherosclerosis. JAMA - Journal of the American Medical Association, 1999, 282, 2035.	7.4	2,852
14	A critical analysis of the role of cholesterol in atherogenesis. Atherosclerosis, 1999, 142, 265-268.	0.8	29
15	Vascular Endothelium, Hemodynamic Forces, and Atherogenesis. American Journal of Pathology, 1999, 155, 1-5.	3.8	193
16	Intra-arterial Prourokinase for Acute Ischemic Stroke. JAMA - Journal of the American Medical Association, 1999, 282, 2003.	7.4	2,784
17	cGMP Is Decreased after Acute Ischemia in Chronically Ischemic Canine Limbs. Journal of Surgical Research, 1999, 86, 167-170.	1.6	3
18	Induction of Nitric Oxide Synthase mRNA by Shear Stress Requires Intracellular Calcium and G-protein Signals and Is Modulated by PI 3 Kinase. Biochemical and Biophysical Research Communications, 1999, 254, 231-242.	2.1	85
19	Modulation by Pathophysiological Stimuli of the Shear Stress-induced Up-regulation of Endothelial Nitric Oxide Synthase Expression in Endothelial Cells. Neurosurgery, 1999, 45, 334-344.	1.1	90

#	ARTICLE	IF	CITATIONS
20	Signalling pathways in vascular endothelium activated by shear stress: relevance to atherosclerosis. <i>Current Opinion in Lipidology</i> , 2000, 11, 167-177.	2.7	48
21	Increased peak blood velocity in association with elevated blood pressure. <i>Ultrasound in Medicine and Biology</i> , 2000, 26, 1387-1391.	1.5	13
22	Regulation of the endothelin system by shear stress in human endothelial cells. <i>Journal of Physiology</i> , 2000, 525, 761-770.	2.9	142
23	Mechanical stress-initiated signal transductions in vascular smooth muscle cells. <i>Cellular Signalling</i> , 2000, 12, 435-445.	3.6	263
24	Characterization of caveolins from human knee joint cartilage: expression of caveolin-1, -2, and -3 in chondrocytes and association with integrin $\beta 1$ . <i>Histochemistry and Cell Biology</i> , 2000, 113, 221-225.	1.7	33
25	The NF- $\kappa$ B signal transduction pathway in aortic endothelial cells is primed for activation in regions predisposed to atherosclerotic lesion formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000, 97, 9052-9057.	7.1	516
26	Laminar Shear Stress Upregulates the Complement-Inhibitory Protein Clusterin. <i>Circulation</i> , 2000, 101, 352-355.	1.6	56
27	eNOS-Overexpressing Endothelial Cells Inhibit Platelet Aggregation and Smooth Muscle Cell Proliferation in Vitro. <i>Tissue Engineering</i> , 2000, 6, 241-251.	4.6	56
28	Predicting Restenosis. <i>Circulation</i> , 2000, 101, 946-947.	1.6	10
29	Laminar Shear Stress Inhibits Vascular Endothelial Cell Proliferation by Inducing Cyclin-Dependent Kinase Inhibitor p21 <sup>Sdi1/Cip1/Waf1</sup> . <i>Circulation Research</i> , 2000, 86, 185-190.	4.5	232
30	Ras/Rac-Dependent Activation of p38 Mitogen-Activated Protein Kinases in Smooth Muscle Cells Stimulated by Cyclic Strain Stress. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2000, 20, E1-9.	2.4	77
31	About the role of shear stress in atherogenesis. <i>Cardiovascular Research</i> , 2000, 45, 270-272.	3.8	21
32	Hyperexpression and Activation of Extracellular Signal-Regulated Kinases (ERK1/2) in Atherosclerotic Lesions of Cholesterol-Fed Rabbits. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2000, 20, 18-26.	2.4	60
33	Shear Stress-Dependent Regulation of the Human $\beta$ -Tubulin Folding Cofactor D Gene. <i>Circulation Research</i> , 2000, 87, 1188-1194.	4.5	32
34	E-Selectin-Dependent Signaling Via the Mitogen-Activated Protein Kinase Pathway in Vascular Endothelial Cells. <i>Journal of Immunology</i> , 2000, 165, 2142-2148.	0.8	75
35	Nitric Oxide Synthase in Atherosclerosis and Vascular Injury. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2000, 20, 1873-1881.	2.4	87
36	Fluid Shear Stress Induces Lipocalin-Type Prostaglandin D <sub>2</sub> Synthase Expression in Vascular Endothelial Cells. <i>Circulation Research</i> , 2000, 86, 967-973.	4.5	110
37	Distinct Regulation of Vascular Endothelial Growth Factor in Intact Human Conduit Vessels Exposed to Laminar Fluid Shear Stress and Pressure. <i>Biochemical and Biophysical Research Communications</i> , 2000, 272, 490-496.	2.1	45

#	ARTICLE	IF	CITATIONS
38	Shear Stress Enhances Glutathione Peroxidase Expression in Endothelial Cells. Biochemical and Biophysical Research Communications, 2000, 273, 66-71.	2.1	88
39	Shear Stress-Dependent Expression of Apoptosis-Regulating Genes in Endothelial Cells. Biochemical and Biophysical Research Communications, 2000, 278, 740-746.	2.1	58
40	Quantitative Morphodynamics of Endothelial Cells within Confluent Cultures in Response to Fluid Shear Stress. Biophysical Journal, 2000, 79, 1285-1297.	0.5	63
41	A Role for Nitric Oxide in Muscle Repair: Nitric Oxide-mediated Activation of Muscle Satellite Cells. Molecular Biology of the Cell, 2000, 11, 1859-1874.	2.1	370
42	Wall Shear Stress and Early Atherosclerosis. American Journal of Roentgenology, 2000, 174, 1657-1665.	2.2	227
43	Mechanotransduction and arterial smooth muscle cells: new insight into hypertension and atherosclerosis. Annals of Medicine, 2000, 32, 233-235.	3.8	18
44	Lipids, cardiovascular disease and atherosclerosis in systemic lupus erythematosus. Lupus, 2000, 9, 194-201.	1.6	37
45	Rheopheresis: Rheologic, Functional, and Structural Aspects. Therapeutic Apheresis and Dialysis, 2000, 4, 348-357.	0.6	63
46	Endothelial cell response to different mechanical forces. Journal of Vascular Surgery, 2000, 32, 789-794.	1.1	114
47	High resolution ex vivo magnetic resonance imaging of in situ coronary and aortic atherosclerotic plaque in a porcine model. Atherosclerosis, 2000, 150, 321-329.	0.8	95
48	The role of plaque rupture and thrombosis in coronary artery disease. Atherosclerosis, 2000, 149, 251-266.	0.8	236
49	Diffuse intimal thickening of coronary arteries in patients with coronary spastic angina. Journal of the American College of Cardiology, 2000, 36, 432-437.	2.8	105
50	Analytical models of atherosclerosis. Atherosclerosis, 2001, 159, 1-7.	0.8	11
51	Effects of Flow Patterns on Endothelial Cell Migration into a Zone of Mechanical Denudation. Biochemical and Biophysical Research Communications, 2001, 285, 751-759.	2.1	124
52	Immune Mechanisms in Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2001, 21, 1876-1890.	2.4	730
53	Vascular Smooth Muscle Growth: Autocrine Growth Mechanisms. Physiological Reviews, 2001, 81, 999-1030.	28.8	341
54	Epithelial Na <sup>+</sup> channels are regulated by flow. American Journal of Physiology - Renal Physiology, 2001, 280, F1010-F1018.	2.7	193
55	Endothelial cellular response to altered shear stress. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2001, 281, L529-L533.	2.9	314

#	ARTICLE	IF	CITATIONS
56	Is PECAM-1 a Mechanoresponsive Molecule?. Cell Structure and Function, 2001, 26, 11-17.	1.1	57
57	Signaling pathway for nitric oxide generation with simulated ischemia in flow-adapted endothelial cells. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 281, H2226-H2232.	3.2	40
58	Flow-induced expression of endothelial Na-K-Cl cotransport: dependence on K <sup>+</sup> and Cl <sup>-</sup> channels. American Journal of Physiology - Cell Physiology, 2001, 280, C216-C227.	4.6	37
59	Role of p38 MAP kinase in endothelial cell alignment induced by fluid shear stress. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 280, H189-H197.	3.2	105
60	Localized reduction of atherosclerosis in von Willebrand factor-deficient mice. Blood, 2001, 98, 1424-1428.	1.4	188
61	Thrombus Formation on Atherosclerotic Plaques: Pathogenesis and Clinical Consequences. Annals of Internal Medicine, 2001, 134, 224.	3.9	253
62	Shear Stress Regulates Endothelial Nitric Oxide Synthase Expression Through c-Src by Divergent Signaling Pathways. Circulation Research, 2001, 89, 1073-1080.	4.5	274
63	Role of actin filaments in endothelial cell-cell adhesion and membrane stability under fluid shear stress. Pflügers Archiv European Journal of Physiology, 2001, 442, 675-687.	2.8	89
64	A Model for Shear Stress-induced Deformation of a Flow Sensor on the Surface of Vascular Endothelial Cells. Journal of Theoretical Biology, 2001, 210, 221-236.	1.7	55
65	Morphologic Responses of Endothelium to Shear Stress: Reorganization of the Adherens Junction. Microcirculation, 2001, 8, 195-206.	1.8	34
66	Intravascular ultrasound study in heart transplant recipients at proximal and distal branch points. American Journal of Cardiology, 2001, 87, 1014-1017.	1.6	0
67	Endothelial dysfunction in cirrhosis and portal hypertension. , 2001, 89, 273-293.		100
68	Role of blood shear stress in the regulation of vascular smooth muscle cell migration. IEEE Transactions on Biomedical Engineering, 2001, 48, 474-483.	4.2	51
69	Biomechanical activation of vascular endothelium as a determinant of its functional phenotype. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 4478-4485.	7.1	496
70	Cyclic Strain Increases Protease-Activated Receptor-1 Expression in Vascular Smooth Muscle Cells. Hypertension, 2001, 38, 1038-1043.	2.7	40
71	Intimal Hyperplasia and Wall Shear in Arterial Bypass Graft Distal Anastomoses: An In Vivo Model Study. Journal of Biomechanical Engineering, 2001, 123, 464-473.	1.3	120
72	Low Blood Flow After Angioplasty Augments Mechanisms of Restenosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2001, 21, 208-213.	2.4	52
73	Sequential Activation of Protein Kinase C (PKC)- $\delta$ and PKC- $\mu$ Contributes to Sustained Raf/ERK1/2 Activation in Endothelial Cells under Mechanical Strain. Journal of Biological Chemistry, 2001, 276, 31368-31375.	3.4	70

#	ARTICLE	IF	CITATIONS
74	Heterogenous Nature of Flow-Mediated Dilatation in Human Conduit Arteries In Vivo. Circulation Research, 2001, 88, 145-151.	4.5	333
75	Fluid shear stress inhibits TNF- $\alpha$ activation of JNK but not ERK1/2 or p38 in human umbilical vein endothelial cells: Inhibitory crosstalk among MAPK family members. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 6476-6481.	7.1	209
77	No Effect of Cyclooxygenase Inhibition on Plaque Size in Atherosclerosis-prone Mice. Scandinavian Cardiovascular Journal, 2002, 36, 362-367.	1.2	49
78	Src protein tyrosine kinases in stress responses. Korean Journal of Biological Sciences, 2002, 6, 1-12.	0.1	1
79	Roles of Microtubule Dynamics and Small GTPase Rac in Endothelial Cell Migration and Lamellipodium Formation under Flow. Journal of Vascular Research, 2002, 39, 465-476.	1.4	75
80	Shear Stress-Induced Endothelial Cell Migration Involves Integrin Signaling Via the Fibronectin Receptor Subunits $\alpha_5$ and $\beta_1$ . Arteriosclerosis, Thrombosis, and Vascular Biology, 2002, 22, 69-75.	2.4	140
81	VEGF receptor 2 and the adherens junction as a mechanical transducer in vascular endothelial cells. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 9462-9467.	7.1	308
82	Arterial structure and function in end-stage renal disease. Nephrology Dialysis Transplantation, 2002, 17, 1713-1724.	0.7	183
83	Fluid Shear Stress Attenuates Hydrogen Peroxide-Induced c-Jun NH2-Terminal Kinase Activation via a Glutathione Reductase-Mediated Mechanism. Circulation Research, 2002, 91, 712-718.	4.5	71
84	A New <i>In Vitro</i> Model to Evaluate Differential Responses of Endothelial Cells to Simulated Arterial Shear Stress Waveforms. Journal of Biomechanical Engineering, 2002, 124, 397-407.	1.3	181
85	Multi-directional flow chamber: analysis of endothelial cell morphology dependence on differential shear forces. , 0, , .		0
86	Modeling shear stress sensing and transmission in vascular endothelial cells. , 0, , .		1
87	Vector Analysis of the Wall Shear Rate at the Human Aortoiliac Bifurcation Using Cine MR Velocity Mapping. American Journal of Roentgenology, 2002, 178, 995-999.	2.2	19
88	Rapid Phosphorylation of Heterogeneous Nuclear Ribonucleoprotein C1/C2 in Response to Physiologic Levels of Hydrogen Peroxide in Human Endothelial Cells. Journal of Biological Chemistry, 2002, 277, 15621-15628.	3.4	34
89	Cyclic stretch activates ERK1/2 via G proteins and EGFR in alveolar epithelial cells. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2002, 282, L883-L891.	2.9	105
90	Gene expression profiling of human aortic endothelial cells exposed to disturbed flow and steady laminar flow. Physiological Genomics, 2002, 9, 27-41.	2.3	263
91	Interplay between integrins and FLK-1 in shear stress-induced signaling. American Journal of Physiology - Cell Physiology, 2002, 283, C1540-C1547.	4.6	117
92	Gene expression profile of human endothelial cells exposed to sustained fluid shear stress. Physiological Genomics, 2002, 12, 13-23.	2.3	111

#	ARTICLE	IF	CITATIONS
93	Endothelial responses to mechanical stress: Where is the mechanosensor?. Critical Care Medicine, 2002, 30, S198-S206.	0.9	125
94	Differential Mechanical Activation of Mitogen-Activated Protein Kinases in Intact Human Blood Vessels. Journal of Surgical Research, 2002, 108, 198-202.	1.6	9
95	Large scale isolation of non-uniform shear stress-responsive genes from cultured human endothelial cells through the preparation of a subtracted cDNA library. Atherosclerosis, 2002, 162, 323-334.	0.8	58
96	Unsteady and Three-Dimensional Simulation of Blood Flow in the Human Aortic Arch. Journal of Biomechanical Engineering, 2002, 124, 378-387.	1.3	223
97	Molecular Control of Capillary Growth in Skeletal Muscle. Applied Physiology, Nutrition, and Metabolism, 2002, 27, 491-515.	1.7	21
98	Congenital absence of the external carotid artery: Atherosclerosis without a bifurcation. Journal of Vascular Surgery, 2002, 35, 573-575.	1.1	20
99	The Kinase Insert Domain-containing Receptor (KDR) is Regulated by Shear Stress. Scandinavian Cardiovascular Journal, 2002, 36, 368-372.	1.2	8
100	Shear stress mediates tyrosylprotein sulfotransferase isoform shift in human endothelial cells. Biochemical and Biophysical Research Communications, 2002, 294, 541-546.	2.1	15
101	Determination of in vivo velocity and endothelial shear stress patterns with phasic flow in human coronary arteries: A methodology to predict progression of coronary atherosclerosis. American Heart Journal, 2002, 143, 931-939.	2.7	107
102	Endothelial dysfunction in cold-induced hypertensive rats. American Journal of Hypertension, 2002, 15, 176-180.	2.0	39
103	Efectos mec�nicos y din�micos de la hipertensi�n sobre el endotelio. Hipertension Y Riesgo Vascular, 2002, 19, 1-5.	0.6	0
104	Shear stress levels in paralyzed legs of spinal cord-injured individuals with and without nerve degeneration. Journal of Applied Physiology, 2002, 92, 2335-2340.	2.5	37
105	Control of the Shape of a Thrombus-Neointima-Like Structure by Blood Shear Stress. Journal of Biomechanical Engineering, 2002, 124, 30-36.	1.3	19
106	Ultrasound Improves Tissue Perfusion in Ischemic Tissue through a Nitric Oxide Dependent Mechanism. Thrombosis and Haemostasis, 2002, 88, 865-870.	3.4	96
107	Tissue Factor Activity Is Upregulated in Human Endothelial Cells Exposed to Oscillatory Shear Stress. Thrombosis and Haemostasis, 2002, 87, 1062-1068.	3.4	47
108	Structure and function of endothelial caveolae. Microscopy Research and Technique, 2002, 57, 350-364.	2.2	145
109	Endothelial Cell Dynamics under Pulsating Flows: Significance of High Versus Low Shear Stress Slew Rates. Annals of Biomedical Engineering, 2002, 30, 646-656.	2.5	71
110	Activation of Rac1 by shear stress in endothelial cells mediates both cytoskeletal reorganization and effects on gene expression. EMBO Journal, 2002, 21, 6791-6800.	7.8	297

#	ARTICLE	IF	CITATIONS
111	Differential Responsiveness of Vascular Endothelial Cells to Different Types of Fluid Mechanical Shear Stress. <i>Cell Biochemistry and Biophysics</i> , 2003, 38, 323-343.	1.8	100
112	A common mechanism for the mechanosensitive regulation of apoptosis in different cell types and for different mechanical stimuli. <i>Apoptosis: an International Journal on Programmed Cell Death</i> , 2003, 8, 531-538.	4.9	20
113	The role of hemodynamics in the development of the outflow tract of the heart. <i>Journal of Engineering Mathematics</i> , 2003, 45, 91-104.	1.2	18
114	Site of Carotid Plaque Ulceration in Relation to Direction of Blood Flow: An Angiographic and Pathological Study. <i>Cerebrovascular Diseases</i> , 2003, 16, 369-375.	1.7	98
115	Correlation of Intimal Hyperplasia Development and Shear Stress Distribution at the Distal End-side-anastomosis, in vitro Study Using Particle Image Velocimetry. <i>European Journal of Vascular and Endovascular Surgery</i> , 2003, 26, 357-366.	1.5	23
116	Local Haemodynamics and Shear Stress in Cuffed and Straight PTFE-venous Anastomoses: An in-vitro Comparison using Particle Image Velocimetry. <i>European Journal of Vascular and Endovascular Surgery</i> , 2003, 26, 367-373.	1.5	29
117	Activation of PKC- $\gamma$ and ERK1/2 participates in shear-induced endothelial MCP-1 expression that is repressed by nitric oxide. <i>Journal of Cellular Physiology</i> , 2003, 195, 428-434.	4.1	38
118	Endothelial cell functions. <i>Journal of Cellular Physiology</i> , 2003, 196, 430-443.	4.1	585
119	Novel roles of neuropeptide processing enzymes: EC3.4.24.15 in the neurome. <i>Journal of Neuroscience Research</i> , 2003, 74, 456-467.	2.9	25
120	Reproducibility of coronary lumen, plaque, and vessel wall reconstruction and of endothelial shear stress measurements in vivo in humans. <i>Catheterization and Cardiovascular Interventions</i> , 2003, 60, 67-78.	1.7	74
121	THE CLINICAL EPIDEMIOLOGY OF CARDIOVASCULAR DISEASES IN CHRONIC KIDNEY DISEASE: Cardiovascular Disease in Chronic Renal Failure: Pathophysiologic Aspects. <i>Seminars in Dialysis</i> , 2003, 16, 85-94.	1.3	248
122	Hipercolesterolemia y disfunci3n endotelial: mecanismos implicados. <i>Hipertension Y Riesgo Vascular</i> , 2003, 20, 116-126.	0.6	0
123	Antisense basic fibroblast growth factor alters the time course of mitogen-activated protein kinase in arterialized vein graft remodeling. <i>Journal of Vascular Surgery</i> , 2003, 37, 866-873.	1.1	27
124	Videodensitometric blood flow analysis of abdominal aortic aneurysm and intravascular coagulation. <i>Journal of Vascular Surgery</i> , 2003, 38, 340-345.	1.1	3
125	Enhanced external counterpulsation for ischemic heart disease. <i>Journal of the American College of Cardiology</i> , 2003, 41, 1918-1925.	2.8	124
126	Effects of Periodic Body Acceleration on the In Vivo Vasoactive Response to N-w-nitro6L-arginine and the In Vitro Nitric Oxide Production. <i>Annals of Biomedical Engineering</i> , 2003, 31, 1337-1346.	2.5	38
127	Plasminogen activator inhibitor contributes to the coronary wall thickening in patients with angiographically normal coronary. <i>Thrombosis Research</i> , 2003, 112, 123-129.	1.7	6
128	Caveolin, Caveolae, and Endothelial Cell Function. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2003, 23, 1161-1168.	2.4	326



#	ARTICLE	IF	CITATIONS
129	Shear stress increases the amount of S-nitrosylated molecules in endothelial cells: important role for signal transduction. FEBS Letters, 2003, 551, 153-158.	2.8	56
130	Effect of the NAD(P)H oxidase inhibitor, apocynin, on peripheral nerve perfusion and function in diabetic rats. Life Sciences, 2003, 73, 1813-1824.	4.3	105
131	Intact capillaries sensitive to rate, magnitude, and pattern of shear stress stimuli as assessed by hydraulic conductivity (lp). Microvascular Research, 2003, 66, 147-158.	2.5	14
132	A Model for Shear Stress Sensing and Transmission in Vascular Endothelial Cells. Biophysical Journal, 2003, 84, 4087-4101.	0.5	37
133	Effect of cilazapril with or without low dose thiazide on LDLperoxidationin hypertensive patients. American Journal of Hypertension, 2003, 16, 734-738.	2.0	1
134	Vascular integrins: pleiotropic adhesion and signaling molecules in vascular homeostasis and angiogenesis. Cellular and Molecular Life Sciences, 2003, 60, 1135-1157.	5.4	153
135	Shear Flow Attenuates Serum-induced STAT3 Activation in Endothelial Cells. Journal of Biological Chemistry, 2003, 278, 19702-19708.	3.4	28
136	Effect of Endothelial Shear Stress on the Progression of Coronary Artery Disease, Vascular Remodeling, and In-Stent Restenosis in Humans. Circulation, 2003, 108, 438-444.	1.6	396
137	Transient Mechanoactivation of Neutral Sphingomyelinase in Caveolae to Generate Ceramide. Journal of Biological Chemistry, 2003, 278, 4424-4430.	3.4	55
138	Monocyte recruitment to endothelial cells in response to oscillatory shear stress. FASEB Journal, 2003, 17, 1648-1657.	0.5	135
139	Effect of flow and stretch on the $[Ca^{2+}]_i$ response of principal and intercalated cells in cortical collecting duct. American Journal of Physiology - Renal Physiology, 2003, 285, F998-F1012.	2.7	197
140	Pulsatile Versus Oscillatory Shear Stress Regulates NADPH Oxidase Subunit Expression. Circulation Research, 2003, 93, 1225-1232.	4.5	300
141	Arterial Wall Shear Stress: Observations from the Bench to the Bedside. Vascular and Endovascular Surgery, 2003, 37, 47-57.	0.7	258
142	Biologically active fragment of a human tRNA synthetase inhibits fluid shear stress-activated responses of endothelial cells. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 14903-14907.	7.1	56
143	Shear Stress and Cyclic Strain May Suppress Apoptosis in Endothelial Cells by Different Pathways. Endothelium: Journal of Endothelial Cell Research, 2003, 10, 149-157.	1.7	40
144	Shear stress-induced up-regulation of the intermediate-conductance $Ca^{2+}$ -activated $K^{+}$ channel in human endothelium. Cardiovascular Research, 2003, 60, 488-496.	3.8	53
145	Prediction of sites of coronary atherosclerosis progression:In vivo profiling of endothelial shear stress, lumen, and outer vessel wall characteristics to predict vascular behavior. Current Opinion in Cardiology, 2003, 18, 458-470.	1.8	100
147	Stress and Vascular Responses: Atheroprotective Effect of Laminar Fluid Shear Stress in Endothelial Cells: Possible Role of Mitogen-Activated Protein Kinases. Journal of Pharmacological Sciences, 2003, 91, 172-176.	2.5	68

#	ARTICLE	IF	CITATIONS
148	Pattern formation of vascular smooth muscle cells subject to nonuniform fluid shear stress: mediation by gradient of cell density. American Journal of Physiology - Heart and Circulatory Physiology, 2003, 285, H1072-H1080.	3.2	27
149	Associations Between Psychological Traits and Endothelial Function in Postmenopausal Women. Psychosomatic Medicine, 2003, 65, 402-409.	2.0	80
150	The role of the endothelium in severe sepsis and multiple organ dysfunction syndrome. Blood, 2003, 101, 3765-3777.	1.4	1,017
151	Shear madness in TNF- $\alpha$ signaling. Blood, 2003, 102, 2711-2712.	1.4	0
152	Shear stress inhibits adhesion molecule expression in vascular endothelial cells induced by coculture with smooth muscle cells. Blood, 2003, 101, 2667-2674.	1.4	148
153	The Role of Biomechanics in Analysis of Cardiovascular Diseases: Regulation of the Fluid Shear Response by Inflammatory Mediators. , 2003, , 337-346.		0
154	Shear stress increases expression of a K <sup>ATP</sup> channel in rat and bovine pulmonary vascular endothelial cells. American Journal of Physiology - Cell Physiology, 2003, 285, C959-C967.	4.6	83
156	Mechanical stresses keep endothelial cells healthy: beneficial effects of a physiological level of cyclic stretch on endothelial barrier function. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2003, 285, L782-L784.	2.9	12
157	Transitional Flow at the Venous Anastomosis of an Arteriovenous Graft: Potential Activation of the ERK1/2 Mechanotransduction Pathway. Journal of Biomechanical Engineering, 2003, 125, 49-61.	1.3	79
158	Biomechanical Stress-induced Signaling in Smooth Muscle Cells: An Update. Current Vascular Pharmacology, 2003, 1, 41-58.	1.7	61
159	Pattern formation of vascular smooth muscle cells subject to nonuniform fluid shear stress: role of PDGF- $\beta$ receptor and Src. American Journal of Physiology - Heart and Circulatory Physiology, 2003, 285, H1081-H1090.	3.2	22
160	Shear Stress Effects on Endothelial Cells. , 2004, 25, 1-7.		0
161	Regulation of endothelial cell function BY FAK and PYK2. Frontiers in Bioscience - Landmark, 2004, 9, 1254.	3.0	58
162	Modulation of endothelial nitric oxide synthase expression by red blood cell aggregation. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H222-H229.	3.2	93
163	P21Waf1/Cip1 in endothelial cell survival. Cardiovascular Research, 2004, 61, 648-650.	3.8	2
164	Collateral Growth in the Peripheral Circulation: A Review. Vascular and Endovascular Surgery, 2004, 38, 291-313.	0.7	18
165	Endothelial Function. Circulation, 2004, 109, II27-33.	1.6	583
166	Fluid shear stress induces endothelial KLF2 gene expression through a defined promoter region. Biological Chemistry, 2004, 385, 723-9.	2.5	65

#	ARTICLE	IF	CITATIONS
167	Adaptation of the endothelium to fluid flow: in vitro analyses of gene expression and in vivo implications. <i>Vascular Medicine</i> , 2004, 9, 35-45.	1.5	69
168	Regulation of Endopeptidases EC3.4.24.15 and EC3.4.24.16 in Vascular Endothelial Cells by Cyclic Strain: Role of Gi Protein Signaling. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2004, 24, 457-463.	2.4	12
169	Big Mitogen-Activated Protein Kinase (BMK1)/ERK5 Protects Endothelial Cells From Apoptosis. <i>Circulation Research</i> , 2004, 94, 362-369.	4.5	150
170	Endothelial Nitric Oxide Synthase. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2004, 24, 405-412.	2.4	168
171	Wall Shear Stress Is Associated With Intima-Media Thickness and Carotid Atherosclerosis in Subjects at Low Coronary Heart Disease Risk. <i>Stroke</i> , 2004, 35, 464-468.	2.0	97
172	Myocardial bridging is associated with alteration in coronary vasoreactivity. <i>European Heart Journal</i> , 2004, 25, 2134-2142.	2.2	78
173	The Hinge-Helix 1 Region of Peroxisome Proliferator-Activated Receptor $\gamma$ 1 (PPAR $\gamma$ 1) Mediates Interaction with Extracellular Signal-Regulated Kinase 5 and PPAR $\gamma$ 1 Transcriptional Activation: Involvement in Flow-Induced PPAR $\gamma$ Activation in Endothelial Cells. <i>Molecular and Cellular Biology</i> , 2004, 24, 8691-8704.	2.3	113
174	Hemodynamic-dependent patterning of endothelin converting enzyme 1 expression and differentiation of impulse-conducting Purkinje fibers in the embryonic heart. <i>Development (Cambridge)</i> , 2004, 131, 581-592.	2.5	97
175	Oxidized Phospholipids Increase Interleukin 8 (IL-8) Synthesis by Activation of the c-src/Signal Transducers and Activators of Transcription (STAT)3 Pathway. <i>Journal of Biological Chemistry</i> , 2004, 279, 30175-30181.	3.4	107
176	Steady Unidirectional Laminar Flow Inhibits Monolayer Formation by Human and Rat Microvascular Endothelial Cells. <i>Endothelium: Journal of Endothelial Cell Research</i> , 2004, 11, 11-16.	1.7	5
177	Shear Stress Regulates Endothelial Nitric-oxide Synthase Promoter Activity through Nuclear Factor $\kappa$ B Binding. <i>Journal of Biological Chemistry</i> , 2004, 279, 163-168.	3.4	184
178	Regulation of Endothelial Nitric Oxide Synthase by Tetrahydrobiopterin in Vascular Disease. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2004, 24, 413-420.	2.4	485
179	Shear Stress Increases ICAM-1 and Decreases VCAM-1 and E-selectin Expressions Induced by Tumor Necrosis Factor- $\alpha$ in Endothelial Cells. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2004, 24, 73-79.	2.4	193
180	Force-induced focal adhesion translocation: effects of force amplitude and frequency. <i>American Journal of Physiology - Cell Physiology</i> , 2004, 287, C954-C962.	4.6	69
181	Arterial Stiffness: Pathophysiology and Clinical Impact. <i>Clinical and Experimental Hypertension</i> , 2004, 26, 689-699.	1.3	127
182	Differential regulation of urokinase-type plasminogen activator expression by fluid shear stress in human coronary artery endothelial cells. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2004, 287, H2027-H2034.	3.2	57
183	Differential membrane potential and ion current responses to different types of shear stress in vascular endothelial cells. <i>American Journal of Physiology - Cell Physiology</i> , 2004, 286, C1367-C1375.	4.6	68
184	Do incremental increases in blood pressure elicit neointimal plaques through endothelial injury?. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2004, 287, R1486-R1493.	1.8	4

#	ARTICLE	IF	CITATIONS
185	Nitric oxide is significantly reduced in vivo porcine arteries during reverse flow because of increased superoxide production. <i>Journal of Physiology</i> , 2004, 561, 575-582.	2.9	101
186	Exercise and endothelial function: Role of endothelium-derived nitric oxide and oxidative stress in healthy subjects and hypertensive patients. , 2004, 102, 87-96.		190
187	Micro Sensors: Linking Real-Time Oscillatory Shear Stress with Vascular Inflammatory Responses. <i>Annals of Biomedical Engineering</i> , 2004, 32, 189-201.	2.5	34
188	Expression of endothelial nitric oxide synthase in the vascular wall during arteriogenesis. <i>Molecular and Cellular Biochemistry</i> , 2004, 264, 193-200.	3.1	47
189	MRI of coronary artery atherosclerosis in rabbits: Histopathology-MRI correlation and atheroma characterization. , 2004, 2, 5.		7
190	Developmental changes in the expression of shear stress responsive genes <i>KLF2</i> , <i>ET-1</i> , and <i>NOS3</i> in the developing cardiovascular system of chicken embryos. <i>Developmental Dynamics</i> , 2004, 230, 57-68.	1.8	113
191	Wall shear rates differ between the normal carotid, femoral, and brachial arteries: An in vivo MRI study. <i>Journal of Magnetic Resonance Imaging</i> , 2004, 19, 188-193.	3.4	116
192	KLF2 Is a Novel Transcriptional Regulator of Endothelial Proinflammatory Activation. <i>Journal of Experimental Medicine</i> , 2004, 199, 1305-1315.	8.5	630
193	Arterial enlargement, tortuosity, and intimal thickening in response to sequential exposure to high and low wall shear stress. <i>Journal of Vascular Surgery</i> , 2004, 39, 601-612.	1.1	147
194	Cyclic strain-induced endothelial MMP-2: role in vascular smooth muscle cell migration. <i>Biochemical and Biophysical Research Communications</i> , 2004, 320, 325-333.	2.1	21
195	Sphingosine kinase-1 mediates TNF- $\alpha$ -induced MCP-1 gene expression in endothelial cells: upregulation by oscillatory flow. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2004, 287, H1452-H1458.	3.2	72
196	The Aqueous Outflow System as a Mechanical Pump. <i>Journal of Glaucoma</i> , 2004, 13, 421-438.	1.6	164
197	The procyanidin-induced pseudo laminar shear stress response: a new concept for the reversal of endothelial dysfunction. <i>Clinical Science</i> , 2004, 107, 513-517.	4.3	30
198	The Effect of a Shear Flow on the Uptake of LDL and Ac-LDL by Cultured Vascular Endothelial Cells. <i>JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing</i> , 2005, 48, 436-443.	0.3	0
199	The effect of flow changes on the arterial system proximal to an arteriovenous fistula for hemodialysis. <i>Ultrasound in Medicine and Biology</i> , 2005, 31, 1327-1333.	1.5	51
200	ACE DD Genotype: A Predisposing Factor for Abdominal Aortic Aneurysm. <i>European Journal of Vascular and Endovascular Surgery</i> , 2005, 29, 227-232.	1.5	57
201	Role of mechanical and redox stress in activation of mitogen-activated protein kinases in primary cultured rat hepatocytes. <i>Biochemical Pharmacology</i> , 2005, 70, 1785-1795.	4.4	20
202	Analysis of flow in a cone-and-plate apparatus with respect to spatial and temporal effects on endothelial cells. <i>Biotechnology and Bioengineering</i> , 2005, 89, 493-502.	3.3	75

#	ARTICLE	IF	CITATIONS
203	Effects of fluid shear stress on apoptosis of cultured human umbilical vein endothelial cells induced by LPS. Cell Biology International, 2005, 29, 932-935.	3.0	21
204	Non-Uniform Flow Behavior in a Parallel Plate Flow Chamber Alters Endothelial Cell Responses. Annals of Biomedical Engineering, 2005, 33, 328-336.	2.5	31
205	Spatial Variations in Shear Stress in a 3-D Bifurcation Model at Low Reynolds Numbers. Annals of Biomedical Engineering, 2005, 33, 1360-1374.	2.5	16
206	Shear stress regulates gene expression in vascular endothelial cells in response to tumor necrosis factor- $\alpha$ : a study of the transcription profile with complementary DNA microarray. Journal of Biomedical Science, 2005, 12, 481-502.	7.0	21
207	Biomedical Vignette. Journal of Biomedical Science, 2005, 12, 441-444.	7.0	0
208	Effect of AT1 receptor antagonism on vascular and circulating inflammatory mediators in SHR: role of NF- $\kappa$ B/ $\text{I}\kappa$ B system. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 288, H111-H115.	3.2	114
209	Flow Activates ERK1/2 and Endothelial Nitric Oxide Synthase via a Pathway Involving PECAM1, SHP2, and Tie2. Journal of Biological Chemistry, 2005, 280, 29620-29624.	3.4	45
210	Potential Adverse Effects Associated with Inhibition of p38 $\alpha$ ; $\beta$ ; MAP Kinases. Current Topics in Medicinal Chemistry, 2005, 5, 929-939.	2.1	92
211	Membrane depolarization and NADPH oxidase activation in aortic endothelium during ischemia reflect altered mechanotransduction. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 288, H336-H343.	3.2	53
212	Pulsatile Flow Increases the Expression of eNOS, ET-1, and Prostacyclin in a Novel In Vitro Coculture Model of the Retinal Vasculature. , 2005, 46, 375.		44
213	Flow Shear Stress Stimulates Gab1 Tyrosine Phosphorylation to Mediate Protein Kinase B and Endothelial Nitric-oxide Synthase Activation in Endothelial Cells. Journal of Biological Chemistry, 2005, 280, 12305-12309.	3.4	92
214	Biomechanical stress induces IL-6 expression in smooth muscle cells via Ras/Rac1-p38 MAPK-NF- $\kappa$ B signaling pathways. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 288, H2946-H2954.	3.2	121
215	Computational Study of Stented Aortic Arch Aneurysms. , 2005, 2005, 2287-90.		3
216	Paradoxical hypotension following increased hematocrit and blood viscosity. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 289, H2136-H2143.	3.2	92
217	DIFFERENTIAL EFFECTS OF SHEAR STRESS ON THE EXPRESSIONS OF ICAM-1 AND VCAM-1 INDUCED BY TNF- $\alpha$ IN ENDOTHELIAL CELLS. Journal of Mechanics in Medicine and Biology, 2005, 05, 63-79.	0.7	1
218	Histone deacetylase activity is essential for the expression of <i>HoxA9</i> and for endothelial commitment of progenitor cells. Journal of Experimental Medicine, 2005, 201, 1825-1835.	8.5	161
219	Analysis of Intimal Proteoglycans in Atherosclerosis-prone and Atherosclerosis-resistant Human Arteries by Mass Spectrometry. Molecular and Cellular Proteomics, 2005, 4, 1350-1357.	3.8	78
220	Atherin: a newly identified, lesion-specific, LDL-binding protein in human atherosclerosis. Atherosclerosis, 2005, 182, 219-230.	0.8	24

#	ARTICLE	IF	CITATIONS
221	eNOS Gene Affects Red Cell Deformability: Role of T-786C, G894T, and 4a/4b Polymorphisms. Clinical and Applied Thrombosis/Hemostasis, 2005, 11, 481-488.	1.7	14
222	The Vulnerable Carotid Artery Plaque. Stroke, 2005, 36, 2764-2772.	2.0	229
223	Modulation of pain-induced endothelial dysfunction by hypnotisability. Pain, 2005, 116, 181-186.	4.2	57
224	A negative feedback mechanism involving nitric oxide and nuclear factor kappa-B modulates endothelial nitric oxide synthase transcription. Journal of Molecular and Cellular Cardiology, 2005, 39, 595-603.	1.9	154
225	High pulse pressure and nondipping circadian blood pressure in patients with coronary artery disease: Relationship to thrombogenesis and endothelial damage/dysfunction. American Journal of Hypertension, 2005, 18, 104-115.	2.0	79
226	Differential responsiveness of early- and late-passage endothelial cells to shear stress. American Journal of Surgery, 2005, 190, 763-769.	1.8	21
227	Biomechanical Stimulation of Vascular Cells In Vitro. , 2005, , 813-828.		0
228	Differential effects of orbital and laminar shear stress on endothelial cells. Journal of Vascular Surgery, 2005, 41, 869-880.	1.1	286
229	Shear stress-stimulated endothelial cells induce smooth muscle cell chemotaxis via platelet-derived growth factor-BB and interleukin-1 $\beta$ . Journal of Vascular Surgery, 2005, 41, 321-331.	1.1	88
230	Shear stress-induced pH increase in plasma is mediated by a decrease in PCO <sub>2</sub> : The increase in pH enhances shear stress-induced P-selectin expression in platelets. Platelets, 2006, 17, 127-133.	2.3	6
231	Role of NADPH Oxidases in Disturbed Flow- and BMP4- Induced Inflammation and Atherosclerosis. Antioxidants and Redox Signaling, 2006, 8, 1609-1619.	5.4	92
232	Chronic Venous Disease. New England Journal of Medicine, 2006, 355, 488-498.	27.0	781
233	Cigarette smoking, regular exercise, and peripheral blood flow. Atherosclerosis, 2006, 185, 201-205.	0.8	30
234	Hemoglobin and atherosclerosis in patients with manifest arterial disease. Atherosclerosis, 2006, 188, 444-449.	0.8	16
235	Decreased wall shear stress in the common carotid artery of patients with peripheral arterial disease or abdominal aortic aneurysm: Relation to blood rheology, vascular risk factors, and intima-media thickness. Journal of Vascular Surgery, 2006, 43, 56-63.	1.1	29
236	The effect of angle on wall shear stresses in a LIMA to LAD anastomosis: Numerical modelling of pulsatile flow. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2006, 220, 743-757.	1.8	43
237	Cholangiocyte Cilia Detect Changes in Luminal Fluid Flow and Transmit Them Into Intracellular Ca <sup>2+</sup> and cAMP Signaling. Gastroenterology, 2006, 131, 911-920.	1.3	259
238	Evolution of the wall shear stresses during the progressive enlargement of symmetric abdominal aortic aneurysms. Journal of Fluid Mechanics, 2006, 560, 19.	3.4	95



#	ARTICLE	IF	CITATIONS
239	Concentration of blood-borne agonists at the endothelium. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2006, 462, 671-688.	2.1	9
240	Intracranial aneurysms: links among inflammation, hemodynamics and vascular remodeling. Neurological Research, 2006, 28, 372-380.	1.3	210
241	Small-Diameter Artificial Arteries Engineered In Vitro. Circulation Research, 2006, 98, 25-35.	4.5	439
242	Role of Small GTPases in Endothelial Cytoskeletal Dynamics and the Shear Stress Response. Circulation Research, 2006, 98, 176-185.	4.5	235
243	Effects of low-intensity pulsed ultrasound on the differentiation of C2C12 cells. Life Sciences, 2006, 79, 1936-1943.	4.3	92
244	Toll-like receptor 4 expressions on peripheral blood monocytes were enhanced in coronary artery disease even in patients with low C-reactive protein. Life Sciences, 2006, 80, 59-66.	4.3	22
245	Molecular imaging of carotid artery disease. , 2006, , 471-483.		0
246	Characterization of an Artificial Valve Flow Using the Numerical Dye Washout Visualization Technique: Application to the Monoleaflet Valve With Purged Flow. Artificial Organs, 2006, 30, 642-650.	1.9	6
247	Flavonoid-rich grapeseed extracts: a new approach in high cardiovascular risk patients?. International Journal of Clinical Practice, 2006, 60, 1484-1492.	1.7	44
248	Endothelial Dysfunction, Hemodynamic Forces, and Atherogenesis <sup>a</sup> . Annals of the New York Academy of Sciences, 2000, 902, 230-240.	3.8	713
249	Mechanosensitive Endothelial Gene Expression Profiles. Annals of the New York Academy of Sciences, 2001, 947, 1-6.	3.8	47
250	NO-mediated regulation of NAD(P)H oxidase by laminar shear stress in human endothelial cells. Journal of Physiology, 2006, 576, 557-567.	2.9	90
251	Secrets of the code: Do vascular endothelial cells use ion channels to decipher complex flow signals?. Biomaterials, 2006, 27, 671-678.	11.4	51
252	Computational fluid dynamics tools can be used to predict the progression of coronary artery disease. Physica A: Statistical Mechanics and Its Applications, 2006, 362, 182-190.	2.6	14
253	Hemodynamic Computation Using Multiphase Flow Dynamics in a Right Coronary Artery. Annals of Biomedical Engineering, 2006, 34, 393-407.	2.5	67
254	Effects of Arterial Bifurcation Geometry on Nucleotide Concentration at the Endothelium. Annals of Biomedical Engineering, 2006, 34, 605-617.	2.5	11
255	Endothelialization and Flow Conditioning of Fibrin-Based Media-Equivalents. Annals of Biomedical Engineering, 2006, 34, 971-985.	2.5	79
256	Proper Orientation of the Graft Artery Is Important to Ensure Physiological Flow Direction. Annals of Biomedical Engineering, 2006, 34, 953-957.	2.5	15

#	ARTICLE	IF	CITATIONS
257	Computational Approach to Estimating the Effects of Blood Properties on Changes in Intra-stent Flow. <i>Annals of Biomedical Engineering</i> , 2006, 34, 1259-1271.	2.5	33
258	Slower Onset of Low Shear Stress Leads to Less Neointimal Thickening in Experimental Vein Grafts. <i>Annals of Vascular Surgery</i> , 2006, 20, 106-113.	0.9	9
260	Intermittent pneumatic compression regulates expression of nitric oxide synthases in skeletal muscles. <i>Journal of Biomechanics</i> , 2006, 39, 2430-2437.	2.1	23
261	Effect of External Counterpulsation on Plasma Nitric Oxide and Endothelin-1 Levels. <i>American Journal of Cardiology</i> , 2006, 98, 28-30.	1.6	75
262	Atherosclerosis and calcium signalling in endothelial cells. <i>Progress in Biophysics and Molecular Biology</i> , 2006, 91, 287-313.	2.9	67
263	Role of AP1 element in the activation of human eNOS promoter by lysophosphatidycholine. <i>Journal of Cellular Biochemistry</i> , 2006, 98, 872-884.	2.6	16
264	Nitric oxide and p38 MAP kinase mediate shear stressâ€dependent inhibition of MMPâ€2 production in microvascular endothelial cells. <i>Journal of Cellular Physiology</i> , 2006, 208, 229-237.	4.1	45
265	Inhibition of Carotis Venous Bypass Graft Disease by Intraoperative Nucleic Acid-Based Therapy in Rabbits. <i>Thoracic and Cardiovascular Surgeon</i> , 2006, 54, 388-392.	1.0	11
266	Anti-inflammatory cytokines in subclinical carotid atherosclerosis. <i>Neurology</i> , 2006, 66, 1946-1948.	1.1	19
267	p38 Mitogen-Activated Protein Kinase Activation in Endothelial Cell Is Implicated in Cell Alignment and Elongation Induced by Fluid Shear Stress. <i>Endothelium: Journal of Endothelial Cell Research</i> , 2006, 13, 43-50.	1.7	28
268	Oxidative Stress, Endothelial Function and Angiogenesis Induced by Cell Therapy and Gene Therapy. <i>Current Pharmaceutical Biotechnology</i> , 2006, 7, 109-116.	1.6	18
269	Shear stress sustains atheroprotective endothelial KLF2 expression more potently than statins through mRNA stabilization. <i>Cardiovascular Research</i> , 2006, 72, 231-240.	3.8	112
270	Redox signalling in vascular responses to shear and stretch. <i>Cardiovascular Research</i> , 2006, 71, 269-279.	3.8	108
271	Oxidized phospholipids mediate occludin expression and phosphorylation in vascular endothelial cells. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006, 290, H674-H683.	3.2	50
272	Increased blood flow causes coordinated upregulation of arterial eNOS and biosynthesis of tetrahydrobiopterin. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006, 290, H786-H793.	3.2	79
273	Papilloma protein E6 abrogates shear stress-dependent survival in human endothelial cells: Evidence for specialized functions of paxillin. <i>Cardiovascular Research</i> , 2006, 70, 578-588.	3.8	9
274	Atherosclerotic Lesion Size and Vulnerability Are Determined by Patterns of Fluid Shear Stress. <i>Circulation</i> , 2006, 113, 2744-2753.	1.6	911
275	Reactive oxygen species mediate shear stress-induced fluid-phase endocytosis in vascular endothelial cells. <i>Free Radical Research</i> , 2006, 40, 167-174.	3.3	15



#	ARTICLE	IF	CITATIONS
276	Mechanosensitive Production of Reactive Oxygen Species in Endothelial and Smooth Muscle Cells: Role in Microvascular Remodeling?. Antioxidants and Redox Signaling, 2006, 8, 1121-1129.	5.4	57
277	Up-regulation of the KLF2 Transcription Factor by Fluid Shear Stress Requires Nucleolin. Journal of Biological Chemistry, 2006, 281, 15121-15128.	3.4	50
278	BIOMECHANICAL CONSIDERATIONS IN THE DESIGN OF GRAFT: THE HOMEOSTASIS HYPOTHESIS. Annual Review of Biomedical Engineering, 2006, 8, 499-535.	12.3	71
279	Shear stress stimulates phosphorylation of protein kinase A substrate proteins including endothelial nitric oxide synthase in endothelial cells. Experimental and Molecular Medicine, 2006, 38, 63-71.	7.7	12
280	Flow-Mediated Signaling Modulates Endothelial Cell Phenotype. Endothelium: Journal of Endothelial Cell Research, 2006, 13, 375-384.	1.7	39
281	Cyclic Strainâ€“Mediated Regulation of Vascular Endothelial Occludin and ZO-1. Arteriosclerosis, Thrombosis, and Vascular Biology, 2006, 26, 62-68.	2.4	80
282	Regulation of bovine brain microvascular endothelial tight junction assembly and barrier function by laminar shear stress. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H3190-H3197.	3.2	94
283	Vascular bed origin dictates flow pattern regulation of endothelial adhesion molecule expression. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H2167-H2175.	3.2	63
284	Flow patterns in three-dimensional porcine epicardial coronary arterial tree. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H2959-H2970.	3.2	88
285	Aryl hydrocarbon receptor mediates laminar fluid shear stress-induced CYP1A1 activation and cell cycle arrest in vascular endothelial cells. Cardiovascular Research, 2007, 77, 809-818.	3.8	41
286	The Role of Shear Stress on ET-1, KLF2, and NOS-3 Expression in the Developing Cardiovascular System of Chicken Embryos in a Venous Ligation Model. Physiology, 2007, 22, 380-389.	3.1	90
287	The shear stress of it all: the cell membrane and mechanochemical transduction. Philosophical Transactions of the Royal Society B: Biological Sciences, 2007, 362, 1459-1467.	4.0	217
288	Matrix-specific p21-activated kinase activation regulates vascular permeability in atherogenesis. Journal of Cell Biology, 2007, 176, 719-727.	5.2	125
289	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
290	Glutaredoxin Mediates Akt and eNOS Activation by Flow in a Glutathione Reductase-Dependent Manner. Arteriosclerosis, Thrombosis, and Vascular Biology, 2007, 27, 1283-1288.	2.4	44
291	Laminar Shear Inhibits Tubule Formation and Migration of Endothelial Cells by an Angiopoietin-2â€“Dependent Mechanism. Arteriosclerosis, Thrombosis, and Vascular Biology, 2007, 27, 2150-2156.	2.4	74
292	Asymptomatic Carotid Artery Stenosis. , 0, , .		13
294	The Anti-Apoptotic Activity of Albumin for Endothelium Is Mediated by a Partially Cryptic Protein Domain and Reduced by Inhibitors of G-Coupled Protein and PI-3 Kinase, but Is Independent of Radical Scavenging or Bound Lipid. Journal of Vascular Research, 2007, 44, 313-324.	1.4	33

#	ARTICLE	IF	CITATIONS
295	Repetition of Ischemic Preconditioning Augments Endothelium-Dependent Vasodilation in Humans. Arteriosclerosis, Thrombosis, and Vascular Biology, 2007, 27, 1403-1410.	2.4	112
296	Mechanisms for the role of tetrahydrobiopterin in endothelial function and vascular disease. Clinical Science, 2007, 113, 47-63.	4.3	167
297	Risk stratification of individual coronary lesions using local endothelial shear stress: a new paradigm for managing coronary artery disease. Current Opinion in Cardiology, 2007, 22, 552-564.	1.8	45
298	<title>On the way to subcellular imaging of mechanotransduction in the developing vasculature</title>. , 2007, , .		0
299	Cyclic strain-mediated matrix metalloproteinase regulation within the vascular endothelium: a force to be reckoned with. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H28-H42.	3.2	71
300	Acute Moderate-Intensity Exercise Induces Vasodilation Through an Increase in Nitric Oxide Bioavailability in Humans. American Journal of Hypertension, 2007, 20, 825-830.	2.0	116
301	Procoagulant stress reactivity and recovery in apparently healthy men with systolic and diastolic hypertension. Journal of Psychosomatic Research, 2007, 63, 51-58.	2.6	13
302	Mechanopathobiology of Atherogenesis: A Review. Journal of Surgical Research, 2007, 142, 202-217.	1.6	37
303	Artery regional properties and atherosclerosis susceptibility. Life Sciences, 2007, 80, 299-306.	4.3	3
304	The role of endothelial calcium and nitric oxide in the localisation of atherosclerosis. Mathematical Biosciences, 2007, 207, 26-39.	1.9	25
305	Is left coronary system more susceptible to atherosclerosis than right?. International Journal of Cardiology, 2007, 116, 7-13.	1.7	54
306	Arterial structure and function in end-stage renal disease. Artery Research, 2007, 1, 79.	0.6	12
307	Transcriptional and post-transcriptional regulation of preproendothelin-1 by plaque-prone hemodynamics. Atherosclerosis, 2007, 194, 383-390.	0.8	10
308	Computer Simulation of Hemodynamic Changes After Right Lobectomy in a Liver with Intrahepatic Portal Vein Aneurysm. Journal of the Formosan Medical Association, 2007, 106, 617-623.	1.7	6
309	Molecular Sensors for Cardiovascular Homeostasis. , 2007, , .		1
310	The Biomechanics of Arterial Aneurysms. Annual Review of Fluid Mechanics, 2007, 39, 293-319.	25.0	235
312	Thiol-based mechanisms of the thioredoxin and glutaredoxin systems: implications for diseases in the cardiovascular system. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H1227-H1236.	3.2	307
313	Role of Endothelial Shear Stress in the Natural History of Coronary Atherosclerosis and Vascular Remodeling. Journal of the American College of Cardiology, 2007, 49, 2379-2393.	2.8	1,211

#	ARTICLE	IF	CITATIONS
314	Resting Heart Rate in Cardiovascular Disease. Journal of the American College of Cardiology, 2007, 50, 823-830.	2.8	867
315	Molecular Mechanisms in Chronic Venous Insufficiency. Annals of Vascular Surgery, 2007, 21, 260-266.	0.9	51
316	Mechanobiology of mesenchymal stem cells and their use in cardiovascular repair. Frontiers in Bioscience - Landmark, 2007, 12, 5098.	3.0	75
317	Atherothrombosis and Coronary Artery Disease. , 2007, , 629-655.		9
318	The influences of stenosis on the downstream flow pattern in curved arteries. Medical Engineering and Physics, 2007, 29, 868-876.	1.7	53
319	Different roles of nitric oxide synthase isoforms in cardiopulmonary resuscitation in pigs. Resuscitation, 2007, 73, 144-153.	3.0	54
320	The role of the fibrocyte, a bone marrow-derived mesenchymal progenitor, in reactive and reparative fibroses. Laboratory Investigation, 2007, 87, 858-870.	3.7	383
321	Mechanical stress-initiated signal transduction in vascular smooth muscle cells in vitro and in vivo. Cellular Signalling, 2007, 19, 881-891.	3.6	126
322	Evidence supporting changes in Nogo-B levels as a marker of neointimal expansion but not adaptive arterial remodeling. Vascular Pharmacology, 2007, 46, 293-301.	2.1	22
323	From pathophysiology to targeted therapy for atherothrombosis: A role for the combination of statin and aspirin in secondary prevention. , 2007, 113, 184-196.		49
324	Effects of exercise training on the cardiovascular system: Pharmacological approaches. , 2007, 114, 307-317.		104
326	Three-phase CFD analytical modeling of blood flow. Medical Engineering and Physics, 2008, 30, 91-103.	1.7	72
327	Arterial structure and function in end-stage renal disease. Current Hypertension Reports, 2008, 10, 107-111.	3.5	36
328	The Flow Field along the Entire Length of Mouse Aorta and Primary Branches. Annals of Biomedical Engineering, 2008, 36, 685-699.	2.5	76
329	Computer Model of Nucleotide Transport in a Realistic Porcine Aortic Trifurcation. Annals of Biomedical Engineering, 2008, 36, 1175-1187.	2.5	14
330	The response of human embryonic stem cell-derived endothelial cells to shear stress. Biotechnology and Bioengineering, 2008, 100, 830-837.	3.3	83
331	Infective endocarditis in an urban medical center: Association of individual drugs with valvular involvement. Journal of Infection, 2008, 57, 132-138.	3.3	48
332	Endothelial Atheroprotective and Anti-inflammatory Mechanisms. Annals of the New York Academy of Sciences, 2001, 947, 93-111.	3.8	195

#	ARTICLE	IF	CITATIONS
333	Effect of Enhanced External Counterpulsation on Inflammatory Cytokines and Adhesion Molecules in Patients With Angina Pectoris and Angiographic Coronary Artery Disease. American Journal of Cardiology, 2008, 101, 300-302.	1.6	46
334	Vascular repair by endothelial progenitor cells. Cardiovascular Research, 2008, 78, 413-421.	3.8	399
335	Elevated heart rate and atherosclerosis: An overview of the pathogenetic mechanisms. International Journal of Cardiology, 2008, 126, 302-312.	1.7	208
336	Intra-aneurysmal hemodynamics in a large middle cerebral artery aneurysm with wall atherosclerosis. World Neurosurgery, 2008, 70, 454-462.	1.3	18
337	Fluid shear stress inhibits TNF-mediated JNK activation via MEK5â€“BMK1 in endothelial cells. Biochemical and Biophysical Research Communications, 2008, 370, 159-163.	2.1	46
338	Increased reversal and oscillatory shear stress cause smooth muscle contractionâ€“dependent changes in sheep aortic dynamics: role in aortic balloon pump circulatory support. Acta Physiologica, 2008, 192, 487-503.	3.8	28
339	Bicompartmental device for dynamic cell coculture: Design, realisation and preliminary results. Journal of Bioscience and Bioengineering, 2008, 105, 536-544.	2.2	6
340	Targeting the ailing endothelium â€“ current concepts and future prospects. Canadian Journal of Cardiology, 2008, 24, 38C-43C.	1.7	1
341	Endothelial Dysfunction: From Molecular Mechanisms to Measurement, Clinical Implications, and Therapeutic Opportunities. Antioxidants and Redox Signaling, 2008, 10, 1631-1674.	5.4	159
342	Biology and Mechanics of Blood Flows. , 2008, , .		12
343	Laminar Shear Stress Up-regulates Peroxiredoxins (PRX) in Endothelial Cells. Journal of Biological Chemistry, 2008, 283, 1622-1627.	3.4	81
344	Lack of Association between Angiotensin-converting Enzyme Gene Polymorphism and Type I Aortic Dissection. Journal of International Medical Research, 2008, 36, 714-720.	1.0	7
345	Shc coordinates signals from intercellular junctions and integrins to regulate flow-induced inflammation. Journal of Cell Biology, 2008, 182, 185-196.	5.2	54
346	Femoral artery remodeling after aerobic exercise training without weight loss in women. Dynamic Medicine: DM, 2008, 7, 13.	2.8	13
347	Myocardial bridging is related to endothelial dysfunction but not to plaque as assessed by intracoronary ultrasound. Heart, 2008, 94, 765-769.	2.9	46
348	Cytochromes CYP1A1 and CYP1B1: new pieces in the puzzle to understand the biomechanical paradigm of atherosclerosis. Cardiovascular Research, 2008, 81, 629-632.	3.8	11
349	Tai Chi Training for Patients with Coronary Heart Disease. , 2008, 52, 182-194.		29
350	KLF2-dependent, Shear Stress-induced Expression of CD59. Journal of Biological Chemistry, 2008, 283, 14636-14644.	3.4	60

#	ARTICLE	IF	CITATIONS
351	Nitric oxide generation by endothelial cells exposed to shear stress in glass tubes perfused with red blood cell suspensions: role of aggregation. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 294, H2098-H2105.	3.2	55
352	<i>Helicobacter pylori</i> -induced inhibition of vascular endothelial cell functions: a role for VacA-dependent nitric oxide reduction. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 295, H1403-H1413.	3.2	26
353	Endothelial Nitric Oxide Synthase and Calcium Production in Arterial Geometries: An Integrated Fluid Mechanics/Cell Model. Journal of Biomechanical Engineering, 2008, 130, 011010.	1.3	39
354	Physical Stress as a Factor in Tissue Growth and Remodeling. , 2008, , 512-535.		0
355	Chapter 2 Physiologic Stressâ€Mediated Signaling in the Endothelium. Methods in Enzymology, 2008, 443, 25-44.	1.0	58
356	RISK OF ANEURYSMAL RUPTURE. Neurosurgery, 2008, 62, 767-775.	1.1	42
357	Nitric Oxide Synthase Function in Exercise. Current Enzyme Inhibition, 2008, 4, 37-45.	0.4	0
358	Mechanotransduction by Membrane-Mediated Activation of G-Protein Coupled Receptors and G-Proteins. , 0, , 89-119.		0
359	Vascular Biology. , 2009, , 12-20.		1
360	Molecular Mechanisms Responsible for the Atheroprotective Effects of Laminar Shear Stress. Antioxidants and Redox Signaling, 2009, 11, 1669-1682.	5.4	108
361	Endothelial Epithelial Sodium Channel Inhibition Activates Endothelial Nitric Oxide Synthase via Phosphoinositide 3-Kinase/Akt in Small-Diameter Mesenteric Arteries. Hypertension, 2009, 53, 1000-1007.	2.7	83
362	Sustained activation of XBP1 splicing leads to endothelial apoptosis and atherosclerosis development in response to disturbed flow. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 8326-8331.	7.1	197
363	A New Observation on the Stress Distribution in the Coronary Artery Wall. Journal of Biomechanical Engineering, 2009, 131, 111011.	1.3	9
364	Shear Stress Induces Synthetic-to-Contractile Phenotypic Modulation in Smooth Muscle Cells via Peroxisome Proliferator-Activated Receptor $\alpha$ Activations by Prostacyclin Released by Sheared Endothelial Cells. Circulation Research, 2009, 105, 471-480.	4.5	86
365	The Subendothelial Extracellular Matrix Modulates JNK Activation by Flow. Circulation Research, 2009, 104, 995-1003.	4.5	86
366	Defining the role of syndecan-4 in mechanotransduction using surface-modification approaches. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22102-22107.	7.1	109
367	ORIGINAL ARTICLE: Heart disease is common in humans and chimpanzees, but is caused by different pathological processes. Evolutionary Applications, 2009, 2, 101-112.	3.1	96
368	Pulse wave velocity and age- and gender-dependent aortic wall hardening in fowl. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2009, 154, 429-436.	1.8	9

#	ARTICLE	IF	CITATIONS
369	Can shear stress direct stem cell fate?. Biotechnology Progress, 2009, 25, 10-19.	2.6	176
370	Regulation of shear-induced nuclear translocation of the Nrf2 transcription factor in endothelial cells. Journal of Biomedical Science, 2009, 16, 12.	7.0	62
371	Effect of 6-months of physical exercise on the nitrate/nitrite levels in hypertensive postmenopausal women. BMC Women's Health, 2009, 9, 17.	2.0	40
372	Impact of Arteriogenesis in Plastic Surgery: Choke Vessel Growth Proceeds via Arteriogenic Mechanisms in the Rat Dorsal Island Skin Flap. Microcirculation, 2009, 16, 235-250.	1.8	26
373	Microengineered Platforms for Cell Mechanobiology. Annual Review of Biomedical Engineering, 2009, 11, 203-233.	12.3	378
374	Endothelial Dysfunction in Patients with Noncomplicated and Complicated Hypertension. Clinical and Experimental Hypertension, 2009, 31, 20-30.	1.3	24
375	T-786C Polymorphism of the nos-3 Gene and the Endothelial Cell Response to Fluid Shear Stressâ€”A Proteome Analysis. Journal of Proteome Research, 2009, 8, 3161-3168.	3.7	27
376	Down-regulation of neprilysin (EC3.4.24.11) expression in vascular endothelial cells by laminar shear stress involves NADPH oxidase-dependent ROS production. International Journal of Biochemistry and Cell Biology, 2009, 41, 2287-2294.	2.8	14
377	Suppression of endothelial t-PA expression by prolonged high laminar shear stress. Biochemical and Biophysical Research Communications, 2009, 379, 532-536.	2.1	6
378	Biomechanics of Coronary Artery and Bypass Graft Disease: Potential New Approaches. Annals of Thoracic Surgery, 2009, 87, 331-338.	1.3	40
380	Endothelial Function in the Stress Echocardiography Laboratory. , 2009, , 375-392.		0
381	Diverse roles of the vasculature within the neural stem cell niche. Regenerative Medicine, 2009, 4, 879-897.	1.7	108
382	Sub-pixel methods for improving vector quality in echo PIV flow, imaging technology. , 2009, 2009, 487-90.		1
383	Heart rate, autonomic markers, and cardiac mortality. Heart Rhythm, 2009, 6, S68-S75.	0.7	79
384	Heart rate, pacing, and outcome in the Dual Chamber and VVI Implantable Defibrillator (DAVID) trials. Heart Rhythm, 2009, 6, 1129-1135.	0.7	5
385	ERK5 and the regulation of endothelial cell function. Biochemical Society Transactions, 2009, 37, 1254-1259.	3.4	72
386	Cellular and molecular effects of mechanical stretch on vascular cells and cardiac myocytes. Clinical Science, 2009, 116, 377-389.	4.3	109
387	Experimental investigation of carotid artery haemodynamics in an anatomically realistic model. International Journal of Experimental and Computational Biomechanics, 2009, 1, 172.	0.4	14

#	ARTICLE	IF	CITATIONS
388	Relationships between hemodynamic, hemorheological and metabolic responses during exercise. Biorheology, 2009, 46, 133-143.	0.4	37
389	Resveratrol as a Supplemental Therapeutic in Cardiovascular and Metabolic Syndromes: A Critical Review. Current Nutrition and Food Science, 2009, 5, 1-8.	0.6	3
390	Models to Study Atherosclerosis: A Mechanistic Insight. Current Vascular Pharmacology, 2009, 7, 75-109.	1.7	50
391	The Role of a Human Hematopoietic Mesenchymal Progenitor in Wound Healing and Fibrotic Diseases and Implications for Therapy. Current Stem Cell Research and Therapy, 2009, 4, 266-280.	1.3	46
392	Lifestyle Choices and Endothelial Function: Risk and Relevance. Current Vascular Pharmacology, 2009, 7, 209-224.	1.7	16
393	Pulse Pressure and Long-Term Survival After Coronary Artery Bypass Graft Surgery. Anesthesia and Analgesia, 2010, 110, 335-340.	2.2	34
394	Role of Shear Stress in the Blister Formation of Cerebral Aneurysms. Neurosurgery, 2010, 67, 1268-1275.	1.1	44
395	Investigation of the Influences of Micro Vibrational Stimuli and Hydrophilicity of a Scaffold on a Bovine Endothelial Cell Culture. , 2010, , .		0
396	FLOW AND ATHEROSCLEROSIS. , 2010, , 1-38.		0
397	SHEAR STRESS-MEDIATED SIGNAL TRANSDUCTION. , 2010, , 39-68.		0
398	RHO FAMILY SMALL GTPASES IN SHEAR STRESS SIGNALING. , 2010, , 123-151.		0
399	Micro-PIV and CFD Studies Show Non-Uniform Wall Shear Stress Distributions Over Endothelial Cells. , 2010, , .		1
400	The role of platelets in the pathogenesis of cerebral malaria. Cellular and Molecular Life Sciences, 2010, 67, 557-568.	5.4	75
401	In the middle of it all: Mutual mechanical regulation between the nucleus and the cytoskeleton. Journal of Biomechanics, 2010, 43, 2-8.	2.1	54
402	Laminar high shear stress up-regulates type IV collagen synthesis and down-regulates MMP-2 secretion in endothelium. A quantitative analysis. Cell and Tissue Research, 2010, 340, 471-479.	2.9	42
403	Novel function of RECS1 as a negative regulator of TNF- $\alpha$ -induced NF- $\kappa$ B activation. Molecular and Cellular Biochemistry, 2010, 337, 317-317.	3.1	0
404	Endothelial damage and stem cell repair in atherosclerosis. Vascular Pharmacology, 2010, 52, 224-229.	2.1	46
405	p38 MAPK activity is stimulated by vascular endothelial growth factor receptor 2 activation and is essential for shear stress-induced angiogenesis. Journal of Cellular Physiology, 2010, 222, 120-126.	4.1	70



#	ARTICLE	IF	CITATIONS
406	Sub- $\epsilon$ population analysis of human cancer vaccine cells' ultra scale-down characterization of response to shear. <i>Biotechnology and Bioengineering</i> , 2010, 106, 584-597.	3.3	14
407	Exogenous and endogenous force regulation of endothelial cell behavior. <i>Journal of Biomechanics</i> , 2010, 43, 79-86.	2.1	104
408	Simulation of multiple morphogenetic movements in the <i>Drosophila</i> embryo by a single 3D finite element model. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2010, 3, 313-323.	3.1	40
409	Editorial: At the Bifurcation of the Last Frontiers. <i>Journal of Interventional Cardiology</i> , 2010, 23, 293-294.	1.2	1
410	T-Cell Trafficking. <i>Methods in Molecular Biology</i> , 2010, , .	0.9	0
411	Common carotid artery hemodynamic factors in patients with cerebral infarctions. <i>Clinical Hemorheology and Microcirculation</i> , 2010, 45, 233-238.	1.7	7
412	X-linked inhibitor of apoptosis protein controls $\alpha_5\beta_1$ -integrin-mediated cell adhesion and migration. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2010, 299, H300-H309.	3.2	24
413	Cytoskeletal structure regulates endothelial cell immunogenicity independent of fluid shear stress. <i>American Journal of Physiology - Cell Physiology</i> , 2010, 298, C333-C341.	4.6	38
414	Aortic Regurgitation Dramatically Alters the Distribution of Atherosclerotic Lesions and Enhances Atherogenesis in Mice. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2010, 30, 1181-1188.	2.4	32
415	The Response of Human Aortic Endothelial Cells in a Stenotic Hemodynamic Environment: Effect of Duration, Magnitude, and Spatial Gradients in Wall Shear Stress. <i>Journal of Biomechanical Engineering</i> , 2010, 132, 071015.	1.3	28
416	Erk5 Activation Elicits a Vasoprotective Endothelial Phenotype via Induction of Kr $\alpha$ 4ppl-like Factor 4 (KLF4). <i>Journal of Biological Chemistry</i> , 2010, 285, 26199-26210.	3.4	120
417	Particle-induced indentation of the alveolar epithelium caused by surface tension forces. <i>Journal of Applied Physiology</i> , 2010, 109, 1179-1194.	2.5	12
418	Pathobiology of Stent Thrombosis after Drug-Eluting Stent Implantation. <i>Current Pharmaceutical Design</i> , 2010, 16, 4064-4071.	1.9	35
419	The Role of Oxidative Stress and Antioxidant Defenses in Buerger Disease and Atherosclerotic Peripheral Arterial Occlusive Disease. <i>Annals of Vascular Surgery</i> , 2010, 24, 455-460.	0.9	19
420	Nonacute Coronary Syndrome Anginal Chest Pain. <i>Medical Clinics of North America</i> , 2010, 94, 201-216.	2.5	17
421	Rôle du stress oxydatif et des défenses anti-oxydantes dans la maladie de Buerger et les lésions artérielles occlusives athéromateuses périphériques. <i>Annales De Chirurgie Vasculaire</i> , 2010, 24, 497-503.	0.0	0
422	Pathological Findings at Bifurcation Lesions. <i>Journal of the American College of Cardiology</i> , 2010, 55, 1679-1687.	2.8	228
423	Rheo-NMR Studies of an Enzymatic Reaction: Evidence of a Shear-Stable Macromolecular System. <i>Biophysical Journal</i> , 2010, 98, 1986-1994.	0.5	13



#	ARTICLE	IF	CITATIONS
424	Elevated heart rate and cardiovascular outcomes in patients with coronary artery disease: Clinical evidence and pathophysiological mechanisms. <i>Atherosclerosis</i> , 2010, 212, 1-8.	0.8	53
425	Analysis of coronary bifurcations by intravascular ultrasound and virtual histology. <i>Atherosclerosis</i> , 2010, 212, 524-527.	0.8	13
426	Macro- and microscale fluid flow systems for endothelial cell biology. <i>Lab on A Chip</i> , 2010, 10, 143-160.	6.0	184
427	Fluid dynamics and atherosclerotic risk burden according as coronary bifurcation angle. , 2010, , .		0
428	Effects of Disturbed Flow on Vascular Endothelium: Pathophysiological Basis and Clinical Perspectives. <i>Physiological Reviews</i> , 2011, 91, 327-387.	28.8	1,661
429	Influences of domain extensions to a moderately stenosed patientâ€™specific carotid bifurcation. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2011, 21, 952-979.	2.8	7
430	Ultrastructure and hemodynamic changes of endothelial cells from myocardial bridge mural coronary artery. , 2011, , .		0
431	Endothelial Cell Culture Model for Replication of Physiological Profiles of Pressure, Flow, Stretch, and Shear Stress <i>in Vitro</i>. <i>Analytical Chemistry</i> , 2011, 83, 3170-3177.	6.5	84
433	Multi-layered nature of the wall of the carotid-artery bifurcation on hemodynamic and mechanical stress and strain. , 2011, , .		1
434	The association between microvascular and macrovascular endothelial function in patients with rheumatoid arthritis: a cross-sectional study. <i>Arthritis Research and Therapy</i> , 2011, 13, R99.	3.5	66
435	Patterning cells and shear flow conditions: Convenient observation of endothelial cell remoulding, enhanced production of angiogenesis factors and drug response. <i>Lab on A Chip</i> , 2011, 11, 4235.	6.0	34
436	Rate Control with Ivabradine. <i>American Journal of Cardiovascular Drugs</i> , 2011, 11, 1-12.	2.2	10
437	Effects of cold exposure and shear stress on endothelial nitric oxide synthase activation. <i>Biochemical and Biophysical Research Communications</i> , 2011, 412, 318-322.	2.1	19
438	Methionine diet-induced hyperhomocysteinemia accelerates cerebral aneurysm formation in rats. <i>Neuroscience Letters</i> , 2011, 494, 139-144.	2.1	31
439	A new hydrodynamic approach by infusion of drag-reducing polymers to improve left ventricular function in rats with myocardial infarction. <i>International Journal of Cardiology</i> , 2011, 147, 112-117.	1.7	13
440	Current status of computational fluid dynamics for cerebral aneurysms: The clinicianâ€™s perspective. <i>Journal of Clinical Neuroscience</i> , 2011, 18, 1285-1288.	1.5	43
441	Erythropoietin increases circulating endothelial progenitor cells and reduces the formation and progression of cerebral aneurysm in rats. <i>Neuroscience</i> , 2011, 181, 292-299.	2.3	45
442	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

#	ARTICLE	IF	CITATIONS
443	Distinct Alterations in Sublingual Microcirculatory Blood Flow and Hemoglobin Oxygenation in On-Pump and Off-Pump Coronary Artery Bypass Graft Surgery. <i>Journal of Cardiothoracic and Vascular Anesthesia</i> , 2011, 25, 784-790.	1.3	64
444	FoxO4 inhibits atherosclerosis through its function in bone marrow derived cells. <i>Atherosclerosis</i> , 2011, 219, 492-498.	0.8	18
445	Effects of Angiotensin II and Shear Stress Interaction on Vascular Inflammation. <i>Journal of the Korean Society of Hypertension</i> , 2011, 17, 17.	0.2	0
446	Agonist-Directed Desensitization of the $\beta_2$ -Adrenergic Receptor. <i>PLoS ONE</i> , 2011, 6, e19282.	2.5	43
447	ACE as a Mechanosensor to Shear Stress Influences the Control of Its Own Regulation via Phosphorylation of Cytoplasmic Ser1270. <i>PLoS ONE</i> , 2011, 6, e22803.	2.5	21
448	JNK2 Promotes Endothelial Cell Alignment under Flow. <i>PLoS ONE</i> , 2011, 6, e24338.	2.5	27
449	Impact of Pulmonary Vascular Resistances in Heart Transplantation for Congenital Heart Disease. <i>Current Cardiology Reviews</i> , 2011, 7, 59-66.	1.5	19
450	Disturbed-Flow-Mediated Vascular Reactive Oxygen Species Induce Endothelial Dysfunction. <i>Circulation Journal</i> , 2011, 75, 2722-2730.	1.6	83
451	MEK5 is Activated by Shear Stress, Activates ERK5 and Induces KLF4 to Modulate TNF Responses in Human Dermal Microvascular Endothelial Cells. <i>Microcirculation</i> , 2011, 18, 102-117.	1.8	59
452	Shear stress increases endothelial hyaluronan synthase 2 and hyaluronan synthesis especially in regard to an atheroprotective flow profile. <i>Experimental Physiology</i> , 2011, 96, 977-986.	2.0	33
453	Co-current flow effects on a rising Taylor bubble. <i>International Journal of Multiphase Flow</i> , 2011, 37, 888-897.	3.4	32
454	Vascular Hemodynamics of the Carotid Bifurcation and Its Relation to Arterial Disease. , 2011, , 41-51.		0
455	Anti-Atherogenic Effect of Laminar Shear Stress via Nrf2 Activation. <i>Antioxidants and Redox Signaling</i> , 2011, 15, 1415-1426.	5.4	68
456	A shear stress responsive gene product PP1201 protects against Fas-mediated apoptosis by reducing Fas expression on the cell surface. <i>Apoptosis: an International Journal on Programmed Cell Death</i> , 2011, 16, 162-173.	4.9	28
457	Tomographic particle image velocimetry investigation of the flow in a modeled human carotid artery bifurcation. <i>Experiments in Fluids</i> , 2011, 50, 1131-1151.	2.4	51
458	Steady and Oscillatory Fluid Flows Produce a Similar Osteogenic Phenotype. <i>Calcified Tissue International</i> , 2011, 88, 189-197.	3.1	38
459	Epigenetic Regulation of Vascular Endothelial Biology/Pathobiology and Response to Fluid Shear Stress. <i>Cellular and Molecular Bioengineering</i> , 2011, 4, 560-578.	2.1	4
460	A miniature Couette to generate shear for flow cytometry: Studying real-time modulation of intracellular calcium in monocytic cells. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2011, 79A, 233-240.	1.5	2

#	ARTICLE	IF	CITATIONS
461	Modeling of shear stress experienced by endothelial cells cultured on microstructured polymer substrates in a parallel plate flow chamber. <i>Biotechnology and Bioengineering</i> , 2011, 108, 1148-1158.	3.3	19
462	Regulation of ankyrin repeat and suppressor of cytokine signalling box protein 4 expression in the immortalized murine endothelial cell lines MS1 and SVR: a role for tumour necrosis factor alpha and oxygen. <i>Cell Biochemistry and Function</i> , 2011, 29, 334-341.	2.9	8
463	Endothelial cell scaffolds generated by 3D direct writing of biodegradable polymer microfibers. <i>Biomaterials</i> , 2011, 32, 1872-1879.	11.4	29
464	Osteogenic differentiation of rat bone marrow stromal cells by various intensities of low-intensity pulsed ultrasound. <i>Ultrasonics</i> , 2011, 51, 281-288.	3.9	122
465	Shear Stress Responses of Adult Blood Outgrowth Endothelial Cells Seeded on Bioartificial Tissue. <i>Tissue Engineering - Part A</i> , 2011, 17, 2511-2521.	3.1	27
466	A microfluidic membrane device to mimic critical components of the vascular microenvironment. <i>Biomicrofluidics</i> , 2011, 5, 13409.	2.4	59
467	Responses of endothelial cells to extremely slow flows. <i>Biomicrofluidics</i> , 2011, 5, 22211.	2.4	40
468	Shear Stress Induces the Release of an Endothelial Elastase: Role in Integrin $\alpha_5\beta_1$ -Mediated FGF-2 Release. <i>Journal of Vascular Research</i> , 2011, 48, 453-464.	1.4	21
469	PKC $\delta$ mediates disturbed flow-induced endothelial apoptosis via p53 SUMOylation. <i>Journal of Cell Biology</i> , 2011, 193, 867-884.	5.2	100
470	Tyrosine nitration limits stretch-induced CD40 expression and disconnects CD40 signaling in human endothelial cells. <i>Blood</i> , 2011, 118, 3734-3742.	1.4	18
471	Patterning Collagen/Poloxamine-Methacrylate Hydrogels for Tissue-Engineering-Inspired Microfluidic and Laser Lithography Applications. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2011, 22, 2499-2514.	3.5	9
472	The complementary role of microCT and histopathology in characterizing the natural history of stented arteries. <i>Expert Review of Cardiovascular Therapy</i> , 2011, 9, 939-948.	1.5	5
473	Noninvasive Assessment of Wall-Shear Rate and Vascular Elasticity Using Combined ARFI/SWEI/Spectral Doppler Imaging System. <i>Ultrasonic Imaging</i> , 2011, 33, 165-188.	2.6	23
474	Effects of shear stress on the number and function of endothelial progenitor cells adhered to specific matrices. <i>Journal of Applied Biomaterials and Biomechanics</i> , 2011, 9, 193-198.	0.4	7
475	Coronary Artery Wall Shear Stress Is Associated With Progression and Transformation of Atherosclerotic Plaque and Arterial Remodeling in Patients With Coronary Artery Disease. <i>Circulation</i> , 2011, 124, 779-788.	1.6	579
476	Flow regulation of collecting duct endothelin-1 production. <i>American Journal of Physiology - Renal Physiology</i> , 2011, 300, F650-F656.	2.7	46
477	MEMS manufacturing techniques for tissue scaffolding devices. , 2012, , 192-217.		0
478	Impact of Drug-Eluting Stents on Distal Vessels. <i>Circulation: Cardiovascular Interventions</i> , 2012, 5, 211-219.	3.9	9

#	ARTICLE	IF	CITATIONS
479	Carotid Intima-Media Thickness Progression in HIV-Infected Adults Occurs Preferentially at the Carotid Bifurcation and Is Predicted by Inflammation. <i>Journal of the American Heart Association</i> , 2012, 1, .	3.7	87
480	Role of histone deacetylases in transcription factor regulation and cell cycle modulation in endothelial cells in response to disturbed flow. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 1967-1972.	7.1	130
481	Quasi-Steady Flow Dynamics Study of Human Aortic Valve with Numerical Techniques. <i>Journal of Mechanics</i> , 2012, 28, 637-646.	1.4	1
482	Idiopathic Hyperviscosity and Thrombosis. <i>Seminars in Thrombosis and Hemostasis</i> , 2012, 38, 854-864.	2.7	30
483	Mesenteric arteries responsiveness to acute variations of wall shear stress is impaired in rats with liver cirrhosis. <i>Scandinavian Journal of Gastroenterology</i> , 2012, 47, 1003-1013.	1.5	5
484	Force-specific activation of Smad1/5 regulates vascular endothelial cell cycle progression in response to disturbed flow. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 7770-7775.	7.1	95
485	A Simple Parallel Plate Flow Chamber to Study Effects of Shear Stress on Endothelial Cells. <i>American Journal of Biomedical Sciences</i> , 2012, , 70-78.	0.2	8
486	Hemodynamics of Cerebral Aneurysms: Computational Analyses of Aneurysm Progress and Treatment. <i>Computational and Mathematical Methods in Medicine</i> , 2012, 2012, 1-11.	1.3	59
487	Bmpr Inhibits Endothelial Expression of Inflammatory Adhesion Molecules and Protects Against Atherosclerosis. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2012, 32, 2214-2222.	2.4	32
488	The regulation of trophoblast migration across endothelial cells by low shear stress: consequences for vascular remodelling in pregnancy. <i>Cardiovascular Research</i> , 2012, 93, 152-161.	3.8	32
489	Disturbed flow in radial-cephalic arteriovenous fistulae for haemodialysis: low and oscillating shear stress locates the sites of stenosis. <i>Nephrology Dialysis Transplantation</i> , 2012, 27, 358-368.	0.7	138
490	Tensegrity finite element models of mechanical tests of individual cells. <i>Technology and Health Care</i> , 2012, 20, 135-150.	1.2	13
491	Combinations of Hydrostatic Pressure and Shear Stress Time-dependently Decrease E-selectin, VCAM-1 and ICAM-1 Expression Induced by Tumor Necrosis Factor-Alpha in Cultured Endothelial Cells. <i>Journal of Biomechanical Science and Engineering</i> , 2012, 7, 118-129.	0.3	0
492	Cellular plasticity: the good, the bad, and the ugly? Microenvironmental influences on progenitor cell therapy. <i>Canadian Journal of Physiology and Pharmacology</i> , 2012, 90, 275-285.	1.4	10
493	ERK5: Structure, regulation and function. <i>Cellular Signalling</i> , 2012, 24, 2187-2196.	3.6	199
494	The relationship between resting heart rate and incidence and progression of coronary artery calcification: The multi-ethnic study of atherosclerosis (MESA). <i>Atherosclerosis</i> , 2012, 220, 194-200.	0.8	30
495	Regulation of the human coronary microcirculation. <i>Journal of Molecular and Cellular Cardiology</i> , 2012, 52, 814-821.	1.9	49
496	Endothelial shear stress in the evolution of coronary atherosclerotic plaque and vascular remodelling: current understanding and remaining questions. <i>Cardiovascular Research</i> , 2012, 96, 234-243.	3.8	257

#	ARTICLE	IF	CITATIONS
497	The effect of enhanced external counterpulsation on C-reactive protein and flow-mediated dilation in porcine model of hypercholesterolaemia. <i>Clinical Physiology and Functional Imaging</i> , 2012, 32, 262-267.	1.2	9
498	Endothelial FAK as a therapeutic target in disease. <i>Microvascular Research</i> , 2012, 83, 89-96.	2.5	49
499	Blister-like aneurysms of the internal carotid artery—management considerations. <i>Neurochirurgie</i> , 2012, 58, 170-177.	1.2	15
500	Les anévrismes de type phlyctène de l'artère carotide interne—considérations de traitement. <i>Neurochirurgie</i> , 2012, 58, 178-186.	1.2	0
501	Complement-mediated injury and protection of endothelium: Lessons from atypical haemolytic uraemic syndrome. <i>Immunobiology</i> , 2012, 217, 195-203.	1.9	77
502	Endothelin Converting Enzyme-1 phosphorylation and trafficking. <i>FEBS Letters</i> , 2012, 586, 2212-2217.	2.8	25
503	Chronic exposure to laminar shear stress induces Kruppel-like factor 2 in glomerular endothelial cells and modulates interactions with co-cultured podocytes. <i>International Journal of Biochemistry and Cell Biology</i> , 2012, 44, 1482-1490.	2.8	50
504	Pulsatile flow during cardiopulmonary bypass preserves postoperative microcirculatory perfusion irrespective of systemic hemodynamics. <i>Journal of Applied Physiology</i> , 2012, 112, 1727-1734.	2.5	103
505	Low level laser arrests abdominal aortic aneurysm by collagen matrix reinforcement in apolipoprotein E-deficient mice. <i>Lasers in Surgery and Medicine</i> , 2012, 44, 664-674.	2.1	18
506	Coronary collaterals and risk for restenosis after percutaneous coronary interventions: a meta-analysis. <i>BMC Medicine</i> , 2012, 10, 62.	5.5	29
507	Force-Induced Changes in Subnuclear Movement and Rheology. <i>Biophysical Journal</i> , 2012, 103, 2423-2431.	0.5	83
508	Anti-inflammatory effects of enhanced external counterpulsation in subjects with abnormal glucose tolerance. <i>Applied Physiology, Nutrition and Metabolism</i> , 2012, 37, 1251-1255.	1.9	8
509	MicroRNA-101 mediates the suppressive effect of laminar shear stress on mTOR expression in vascular endothelial cells. <i>Biochemical and Biophysical Research Communications</i> , 2012, 427, 138-142.	2.1	64
510	Hemodynamic Simulation of Intra-stent Blood Flow. <i>Procedia Engineering</i> , 2012, 36, 128-136.	1.2	10
511	The role of tetrahydrobiopterin in inflammation and cardiovascular disease. <i>Thrombosis and Haemostasis</i> , 2012, 108, 832-839.	3.4	49
513	Interaction between Advanced Glycation End Products Formation and Vascular Responses in Femoral and Coronary Arteries from Exercised Diabetic Rats. <i>PLoS ONE</i> , 2012, 7, e53318.	2.5	45
514	Caveolae, caveolins, cavins, and endothelial cell function: new insights. <i>Frontiers in Physiology</i> , 2012, 2, 120.	2.8	146
515	Endothelial and Vascular Smooth Cell Dysfunctions: A Comprehensive Appraisal. , 0, , .		2

#	ARTICLE	IF	CITATIONS
516	Coronary Microvascular Dysfunction in CAD: Consequences and Potential Therapeutic Applications. , 0, , .		0
517	The importance of the endothelium in atherothrombosis and coronary stenting. Nature Reviews Cardiology, 2012, 9, 439-453.	13.7	314
518	Microparticle formation after co-culture of human whole blood and umbilical artery in a novel in vitro model of flow. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2012, 81A, 390-399.	1.5	13
519	Multifactorial determinants that govern nanoparticle uptake by human endothelial cells under flow. International Journal of Nanomedicine, 2012, 7, 2943.	6.7	78
520	Tri-Leaflet Valve Design With a Purge Flow for Heart Assist Devices: An In Vitro Optimization Study. Artificial Organs, 2012, 36, 42-48.	1.9	5
521	Reactive Oxygen Species and Endothelial Function – Role of Nitric Oxide Synthase Uncoupling and Nox Family Nicotinamide Adenine Dinucleotide Phosphate Oxidases. Basic and Clinical Pharmacology and Toxicology, 2012, 110, 87-94.	2.5	242
522	Critical role of hydrogen peroxide signaling in the sequential activation of p38 MAPK and eNOS in laminar shear stress. Free Radical Biology and Medicine, 2012, 52, 1093-1100.	2.9	57
523	Cardiovascular stent design and wall shear stress distribution in coronary stented arteries. Micro and Nano Letters, 2012, 7, 430.	1.3	17
524	Maternal left ventricular and endothelial functions in preeclampsia. Acta Obstetrica Et Gynecologica Scandinavica, 2012, 91, 566-573.	2.8	41
525	In Vitro Blood–Brain Barrier Models: Current and Perspective Technologies. Journal of Pharmaceutical Sciences, 2012, 101, 1337-1354.	3.3	230
526	Shear- vs. nanotopography-guided control of growth of endothelial cells on RGD-nanoparticle-nanowell arrays. Journal of Biological Engineering, 2013, 7, 11.	4.7	5
527	Cardiac-like flow generator for long-term imaging of endothelial cell responses to circulatory pulsatile flow at microscale. Lab on A Chip, 2013, 13, 2999.	6.0	61
528	Cardiac Adaptations. , 2013, , .		4
529	A new dynamic in vitro modular capillaries-venules modular system: Cerebrovascular physiology in a box. BMC Neuroscience, 2013, 14, 18.	1.9	89
530	Clinical implications of coronary pressure measurement after stent implantation. Cardiovascular Intervention and Therapeutics, 2013, 28, 170-177.	2.3	18
531	An Experimental Model to Simulate Arterial Pulsatile Flow: In Vitro Pressure and Pressure Gradient Wave Study. Experimental Mechanics, 2013, 53, 649-660.	2.0	6
532	Essential Role of Estrogen for Improvements in Vascular Endothelial Function With Endurance Exercise in Postmenopausal Women. Journal of Clinical Endocrinology and Metabolism, 2013, 98, 4507-4515.	3.6	141
533	Vasculoprotective properties of enhanced external counterpulsation for coronary artery disease: Beyond the hemodynamics. International Journal of Cardiology, 2013, 166, 38-43.	1.7	18

#	ARTICLE	IF	CITATIONS
534	The role of the glomerular endothelium in albumin handling. <i>Nature Reviews Nephrology</i> , 2013, 9, 717-725.	9.6	114
535	Effects of Cyclic Motion on Coronary Blood Flow. <i>Journal of Biomechanical Engineering</i> , 2013, 135, 121002.	1.3	31
536	Vascular Remodeling in Autogenous Arterio-Venous Fistulas by MRI and CFD. <i>Annals of Biomedical Engineering</i> , 2013, 41, 657-668.	2.5	56
537	Genomics of varicose veins and chronic venous insufficiency. <i>Seminars in Vascular Surgery</i> , 2013, 26, 2-13.	2.8	23
538	Low-Intensity Extracorporeal Shock Wave Therapy in Vascular Disease and Erectile Dysfunction: Theory and Outcomes. <i>Sexual Medicine Reviews</i> , 2013, 1, 83-90.	2.9	29
539	A novel system for studying mechanical strain waveform-dependent responses in vascular smooth muscle cells. <i>Lab on A Chip</i> , 2013, 13, 4573.	6.0	23
540	Embryological-Origin-Dependent Differences in Homeobox Expression in Adult Aorta. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2013, 33, 1248-1256.	2.4	53
541	Thrombomodulin and the vascular endothelium: insights into functional, regulatory, and therapeutic aspects. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2013, 304, H1585-H1597.	3.2	159
542	A Multiscale Approach for the Coupled Simulation of Blood Flow and Thrombus Formation in Intracranial Aneurysms. <i>Procedia Computer Science</i> , 2013, 18, 1006-1015.	2.0	9
543	Comparison of Lipid Deposition at Coronary Bifurcations Versus at Nonbifurcation Portions of Coronary Arteries as Determined by Near-Infrared Spectroscopy. <i>American Journal of Cardiology</i> , 2013, 112, 369-372.	1.6	5
544	A recoil resilient lumen support, design, fabrication and mechanical evaluation. <i>Journal of Micromechanics and Microengineering</i> , 2013, 23, 065001.	2.6	6
545	Extracorporeal shock wave stimulates expression of the angiogenic genes via mechanosensory complex in endothelial cells: Mimetic effect of fluid shear stress in endothelial cells. <i>International Journal of Cardiology</i> , 2013, 168, 4168-4177.	1.7	54
546	Heart Rate in Coronary Artery Disease: Should We Lower It?. <i>Current Treatment Options in Cardiovascular Medicine</i> , 2013, 15, 118-128.	0.9	6
547	Adaptation of Cardiac and Skeletal Muscle Mitochondria to Endurance Training: Implications for Cardiac Protection. , 2013, , 375-402.		0
548	A plasma oxidative stress global index in early stages of chronic venous insufficiency. <i>Journal of Vascular Surgery</i> , 2013, 57, 205-213.	1.1	34
549	BMP receptor-integrin interaction mediates responses of vascular endothelial Smad1/5 and proliferation to disturbed flow. <i>Journal of Thrombosis and Haemostasis</i> , 2013, 11, 741-755.	3.8	54
550	Vascular Endothelium. <i>Biomathematical and Biomechanical Modeling of the Circulatory and Ventilatory Systems</i> , 2013, , 453-603.	0.1	1
551	Vascular Cell Physiology Under Shear Flow: Role of Cell Mechanics and Mechanotransduction. <i>Studies in Mechanobiology, Tissue Engineering and Biomaterials</i> , 2013, , 121-141.	1.0	0



#	ARTICLE	IF	CITATIONS
552	Atherosclerotic plaques: Is endothelial shear stress the only factor?. Medical Hypotheses, 2013, 81, 235-239.	1.5	7
553	Coronary and carotid atherosclerosis: Similarities and differences. Atherosclerosis, 2013, 227, 193-200.	0.8	131
554	Interaction between lung cancer cell and myofibroblast influenced by cyclic tensile strain. Lab on A Chip, 2013, 13, 1114.	6.0	20
555	Modeling unsteady flow characteristics using smoothed particle hydrodynamics. Applied Mathematical Modelling, 2013, 37, 1431-1450.	4.2	24
556	Association of peripheral venous disease with arterial endothelial dysfunction: a proof-of-concept study. Phlebology, 2013, 28, 366-368.	1.2	6
557	Shear stress is a positive regulator of thimet oligopeptidase (EC3.4.24.15) in vascular endothelial cells: consequences for MHC1 levels. Cardiovascular Research, 2013, 99, 545-554.	3.8	12
558	Hypertensive stretch regulates endothelial exocytosis of Weibel-Palade bodies through VEGF receptor 2 signaling pathways. Cell Research, 2013, 23, 820-834.	12.0	31
559	Shear stress and flow dynamics of the femoral vein among obese patients who qualify for bariatric surgery. Clinical Hemorheology and Microcirculation, 2013, 54, 313-323.	1.7	11
560	Effects of Cardiovascular Stent Design on Wall Shear Stress Distribution in Straight and Curved Arteries. Applied Mechanics and Materials, 0, 284-287, 1642-1646.	0.2	1
561	Effects of Swedish Massage Therapy on Blood Pressure, Heart Rate, and Inflammatory Markers in Hypertensive Women. Evidence-based Complementary and Alternative Medicine, 2013, 2013, 1-8.	1.2	18
562	Mouse models of plaque rupture. Current Opinion in Lipidology, 2013, 24, 419-425.	2.7	45
563	Effects of Selected Bioactive Natural Products on the Vascular Endothelium. Journal of Cardiovascular Pharmacology, 2013, 62, 111-121.	1.9	23
564	Biomechanics of haemostasis and thrombosis in health and disease: from the macro- to molecular scale. Journal of Cellular and Molecular Medicine, 2013, 17, 579-596.	3.6	35
565	Endothelial caveolar subcellular domain regulation of endothelial nitric oxide synthase. Clinical and Experimental Pharmacology and Physiology, 2013, 40, 753-764.	1.9	31
566	Reestablishment of the Endothelial Lining by Endothelial Cell Therapy Stabilizes Experimental Abdominal Aortic Aneurysms. Circulation, 2013, 127, 1877-1887.	1.6	52
567	Increase in Mean Platelet Volume in Patients With Myocardial Bridge. Clinical and Applied Thrombosis/Hemostasis, 2013, 19, 437-440.	1.7	2
568	Rac1 mediates laminar shear stress-induced vascular endothelial cell migration. Cell Adhesion and Migration, 2013, 7, 472-478.	2.7	9
569	Mechanosensitive Properties in the Endothelium and Their Roles in the Regulation of Endothelial Function. Journal of Cardiovascular Pharmacology, 2013, 61, 461-470.	1.9	36



#	ARTICLE	IF	CITATIONS
570	Computational Fluid Dynamic Analysis of Intracranial Aneurysmal Bleb Formation. <i>Neurosurgery</i> , 2013, 73, 1061-1069.	1.1	38
571	Heart Rate Significantly Influences the Relationship between Atrial Fibrillation and Arterial Stiffness. <i>International Journal of Medical Sciences</i> , 2013, 10, 1295-1300.	2.5	13
572	Autologous Bone-Marrow Mesenchymal Stem Cell Implantation and Endothelial Function in a Rabbit Ischemic Limb Model. <i>PLoS ONE</i> , 2013, 8, e67739.	2.5	24
573	Propose a Wall Shear Stress Divergence to Estimate the Risks of Intracranial Aneurysm Rupture. <i>Scientific World Journal</i> , The, 2013, 2013, 1-8.	2.1	8
574	Association Between Renal Vasculature Changes and Generalized Atherosclerosis: An Autopsy Survey. <i>Journal of Atherosclerosis and Thrombosis</i> , 2014, 21, 99-107.	2.0	6
575	Exercise-Mediated Wall Shear Stress Increases Mitochondrial Biogenesis in Vascular Endothelium. <i>PLoS ONE</i> , 2014, 9, e111409.	2.5	52
576	Sulodexide Down-Regulates the Release of Cytokines, Chemokines, and Leukocyte Colony Stimulating Factors from Human Macrophages: Role of Glycosaminoglycans in Inflammatory Pathways of Chronic Venous Disease. <i>Current Vascular Pharmacology</i> , 2014, 12, 173-185.	1.7	44
577	Shear-induced force transmission in a multicomponent, multicell model of the endothelium. <i>Journal of the Royal Society Interface</i> , 2014, 11, 20140431.	3.4	24
578	Applying shear stress to endothelial cells in a new perfusion chamber: hydrodynamic analysis. <i>Journal of Artificial Organs</i> , 2014, 17, 329-336.	0.9	14
579	Shear Stress and Atherosclerosis. <i>Molecules and Cells</i> , 2014, 37, 435-440.	2.6	117
580	Assessment of neutrophil / lymphocyte ratio in patients with myocardial bridge. <i>Journal of Clinical and Experimental Investigations</i> , 2014, 5, .	0.3	2
582	Heart rate: a prognostic factor and therapeutic target in chronic heart failure. The distinct roles of drugs with heart rate-lowering properties. <i>European Journal of Heart Failure</i> , 2014, 16, 76-85.	7.1	70
583	Combined effects of physiologically relevant disturbed wall shear stress and glycated albumin on endothelial cell functions associated with inflammation, thrombosis and cytoskeletal dynamics. <i>Journal of Diabetes Investigation</i> , 2014, 5, 372-381.	2.4	14
584	Advances in endothelial shear stress proteomics. <i>Expert Review of Proteomics</i> , 2014, 11, 611-619.	3.0	16
585	Calcium's Role in Mechanotransduction during Muscle Development. <i>Cellular Physiology and Biochemistry</i> , 2014, 33, 249-272.	1.6	11,109
586	Computational fluid dynamics of the right ventricular outflow tract and of the pulmonary artery: a bench model of flow dynamics. <i>Interactive Cardiovascular and Thoracic Surgery</i> , 2014, 19, 611-616.	1.1	13
587	Influence of inflammation on cardiovascular protective effects of cytochrome P450 epoxygenase-derived epoxyeicosatrienoic acids. <i>Drug Metabolism Reviews</i> , 2014, 46, 33-56.	3.6	24
588	Inadequate reinforcement of transmedial disruptions at branch points subtends aortic aneurysm formation in apolipoprotein-E-deficient mice. <i>Cardiovascular Pathology</i> , 2014, 23, 152-159.	1.6	16

#	ARTICLE	IF	CITATIONS
589	Atrial endothelial impairment through Toll-like receptor 4 signaling causes atrial thrombogenesis. <i>Heart and Vessels</i> , 2014, 29, 263-272.	1.2	31
591	Impact of Weight Loss Due to Sleeve Gastrectomy on Shear Stress of the Femoral Vein in Morbid Obesity. <i>Obesity Surgery</i> , 2014, 24, 806-812.	2.1	12
592	Experimental tools to monitor the dynamics of endothelial barrier function: a survey of in vitro approaches. <i>Cell and Tissue Research</i> , 2014, 355, 485-514.	2.9	52
593	Differential gene expression in Lin-/VEGF-R2+ bone marrow-derived endothelial progenitor cells isolated from diabetic mice. <i>Cardiovascular Diabetology</i> , 2014, 13, 42.	6.8	16
594	Citreoviridin inhibits cell proliferation and enhances apoptosis of human umbilical vein endothelial cells. <i>Environmental Toxicology and Pharmacology</i> , 2014, 37, 828-836.	4.0	12
595	Beta-Blockers and Ivabradine in Chronic Heart Failure: From Clinical Trials to Clinical Practice. <i>American Journal of Cardiovascular Drugs</i> , 2014, 14, 101-110.	2.2	13
596	Engineering of arteries in vitro. <i>Cellular and Molecular Life Sciences</i> , 2014, 71, 2103-2118.	5.4	99
597	Shear-induced endothelial NOS activation and remodeling via heparan sulfate, glypican-1, and syndecan-1. <i>Integrative Biology (United Kingdom)</i> , 2014, 6, 338-347.	1.3	160
598	Endothelial cell TIMP-1 is upregulated by shear stress via Sp-1 and the TGF $\beta$ 1 signaling pathways. <i>Biochemistry and Cell Biology</i> , 2014, 92, 77-83.	2.0	10
599	Hypertensive Vasculopathy. , 2014, , 1-28.		0
600	Impaired Vascular Function in Physically Active Premenopausal Women With Functional Hypothalamic Amenorrhea Is Associated With Low Shear Stress and Increased Vascular Tone. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2014, 99, 1798-1806.	3.6	17
601	Computational Fluid Dynamic Simulation of a Giant Basilar Tip Aneurysm with Eventual Rupture After Hunterian Ligation. <i>World Neurosurgery</i> , 2014, 82, 535.e5-535.e9.	1.3	10
602	Plasticity of hydrogen bond networks regulates mechanochemistry of cell adhesion complexes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 9048-9053.	7.1	46
603	Wall shear stress in hypertensive patients is associated with carotid vascular deformation assessed by speckle tracking strain imaging. <i>Clinical Hypertension</i> , 2014, 20, 10.	2.0	28
604	Regulators and effectors of bone morphogenetic protein signalling in the cardiovascular system. <i>Journal of Physiology</i> , 2015, 593, 2995-3011.	2.9	23
605	Transport of Low-Density Lipoprotein Into the Blood Vessel Wall During Atherogenic Diet in the Isolated Rabbit Carotid Artery. <i>Circulation Journal</i> , 2015, 79, 1846-1852.	1.6	3
606	TRPV4 channel activation selectively inhibits tumor endothelial cell proliferation. <i>Scientific Reports</i> , 2015, 5, 14257.	3.3	46
607	A Methodological Approach to Non-invasive Assessments of Vascular Function and Morphology. <i>Journal of Visualized Experiments</i> , 2015, , .	0.3	10

#	ARTICLE	IF	CITATIONS
608	Shear stress blunts tubuloglomerular feedback partially mediated by primary cilia and nitric oxide at the macula densa. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 309, R757-R766.	1.8	17
609	Csk-Induced Phosphorylation of Src at Tyrosine 530 is Essential for H2O2-Mediated Suppression of ERK1/2 in Human Umbilical Vein Endothelial Cells. Scientific Reports, 2015, 5, 12725.	3.3	9
610	An in vitro test bench reproducing coronary blood flow signals. BioMedical Engineering OnLine, 2015, 14, 77.	2.7	11
611	Fluid dynamics simulation of right ventricular outflow tract oversizing. Interactive Cardiovascular and Thoracic Surgery, 2015, 21, 176-182.	1.1	6
612	Cardiac catheterization: consequences for the endothelium and potential for nanomedicine. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2015, 7, 458-473.	6.1	8
613	Integrins are Mechanosensors That Modulate Human Eosinophil Activation. Frontiers in Immunology, 2015, 6, 525.	4.8	11
614	Citreoviridin Enhances Atherogenesis in Hypercholesterolemic ApoE-Deficient Mice via Upregulating Inflammation and Endothelial Dysfunction. PLoS ONE, 2015, 10, e0125956.	2.5	14
615	Nitric Oxide Increases Arterial Endothelial Permeability through Mediating VE-Cadherin Expression during Arteriogenesis. PLoS ONE, 2015, 10, e0127931.	2.5	21
616	The Vital Role of Blood Flow-Induced Proliferation and Migration in Capillary Network Formation in a Multiscale Model of Angiogenesis. PLoS ONE, 2015, 10, e0128878.	2.5	31
617	Activation of Apoptotic Signal in Endothelial Cells through Intracellular Signaling Molecules Blockade in Tumor-Induced Angiogenesis. BioMed Research International, 2015, 2015, 1-12.	1.9	0
618	Regulation of Endothelial Cell Metabolism. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, 13-15.	2.4	20
619	Endothelium microenvironment sensing leading to nitric oxide mediated vasodilation: A review of nervous and biomechanical signals. Nitric Oxide - Biology and Chemistry, 2015, 45, 20-26.	2.7	45
620	Fluid shear, intercellular stress, and endothelial cell alignment. American Journal of Physiology - Cell Physiology, 2015, 308, C657-C664.	4.6	100
621	Cooperative Effects of Matrix Stiffness and Fluid Shear Stress on Endothelial Cell Behavior. Biophysical Journal, 2015, 108, 471-478.	0.5	118
622	Hypertensive Vasculopathy. , 2015, , 1595-1618.		0
623	The combined effect of sidestream smoke and dynamic shear stress on endothelial cell inflammatory responses. Thrombosis Research, 2015, 135, 362-367.	1.7	8
624	Hemodynamic shear stress modulates endothelial cell autophagy: Role of LOX-1. International Journal of Cardiology, 2015, 184, 86-95.	1.7	27
625	A cell-based sensor of fluid shear stress for microfluidics. Lab on A Chip, 2015, 15, 1563-1573.	6.0	36

#	ARTICLE	IF	CITATIONS
626	Epigenetic regulation of endothelial cell-mediated vascular repair. <i>FEBS Journal</i> , 2015, 282, 1605-1629.	4.7	63
627	Application of multiple levels of fluid shear stress to endothelial cells plated on polyacrylamide gels. <i>Lab on A Chip</i> , 2015, 15, 1205-1212.	6.0	55
628	Endothelial-to-mesenchymal transition contributes to fibro-proliferative vascular disease and is modulated by fluid shear stress. <i>Cardiovascular Research</i> , 2015, 108, 377-386.	3.8	189
629	Analysis of flow dynamics in right ventricular outflow tract. <i>Journal of Surgical Research</i> , 2015, 197, 50-57.	1.6	9
630	Flow mediated dilation with photoplethysmography as a substitute for ultrasonic imaging. <i>Physiological Measurement</i> , 2015, 36, 1551-1571.	2.1	6
631	Nuclear stiffening and chromatin softening with progerin expression leads to an attenuated nuclear response to force. <i>Soft Matter</i> , 2015, 11, 6412-6418.	2.7	46
632	Synergistic Impact of Nicotine and Shear Stress Induces Cytoskeleton Collapse and Apoptosis in Endothelial Cells. <i>Annals of Biomedical Engineering</i> , 2015, 43, 2220-2230.	2.5	5
633	In vitro degradation and cell attachment studies of a new electrospun polymeric tubular graft. <i>Progress in Biomaterials</i> , 2015, 4, 67-76.	4.5	11
634	Microfluidically supported biochip design for culture of endothelial cell layers with improved perfusion conditions. <i>Biofabrication</i> , 2015, 7, 015013.	7.1	56
635	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
636	Heterogeneity in vascular smooth muscle cell embryonic origin in relation to adult structure, physiology, and disease. <i>Developmental Dynamics</i> , 2015, 244, 410-416.	1.8	42
637	Association of Resting Heart Rate with Infrarenal Aortic Diameter: A Cross Sectional Study in Chinese Hypertensive Adults. <i>European Journal of Vascular and Endovascular Surgery</i> , 2015, 50, 714-721.	1.5	8
638	A novel computational model for the hemodynamics of bileaflet mechanical valves in the opening phase. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2015, 229, 232-244.	1.8	13
639	Mitogen-activated Protein Kinase (MAPK) Activated by Prostaglandin E2 Phosphorylates Connexin 43 and Closes Osteocytic Hemichannels in Response to Continuous Flow Shear Stress. <i>Journal of Biological Chemistry</i> , 2015, 290, 28321-28328.	3.4	45
640	Further Peripheral Vascular Dysfunction in Heart Failure Patients With a Continuous-Flow Left Ventricular Assist Device. <i>JACC: Heart Failure</i> , 2015, 3, 703-711.	4.1	83
641	$\beta$ -Trace Protein: A Marker of GFR and Other Biological Pathways. <i>American Journal of Kidney Diseases</i> , 2015, 65, 131-146.	1.9	69
642	Translation of Computational Fluid Dynamics Study to Neurosurgery. <i>World Neurosurgery</i> , 2015, 83, 15-16.	1.3	2
643	Thrombomodulin regulation in human brain microvascular endothelial cells in vitro: Role of cytokines and shear stress. <i>Microvascular Research</i> , 2015, 97, 1-5.	2.5	16

#	ARTICLE	IF	CITATIONS
644	Endothelial Plasticity: Shifting Phenotypes through Force Feedback. Stem Cells International, 2016, 2016, 1-15.	2.5	55
645	A Unidirectional Cell Switching Gate by Engineering Grating Length and Bending Angle. PLoS ONE, 2016, 11, e0147801.	2.5	15
646	Glycocalyx Degradation Induces a Proinflammatory Phenotype and Increased Leukocyte Adhesion in Cultured Endothelial Cells under Flow. PLoS ONE, 2016, 11, e0167576.	2.5	74
647	Deep transcriptomic profiling reveals the similarity between endothelial cells cultured under static and oscillatory shear stress conditions. Physiological Genomics, 2016, 48, 660-666.	2.3	23
648	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
649	A method for high-throughput functional imaging of single cells within heterogeneous cell preparations. Scientific Reports, 2016, 6, 39319.	3.3	6
650	Targeted Delivery of Shear Stress-Inducible microRNAs by Nanoparticles to Prevent Vulnerable Atherosclerotic Lesions. Methodist DeBakey Cardiovascular Journal, 2021, 12, 152.	1.0	8
652	Megakaryocytic Maturation in Response to Shear Flow Is Mediated by the Activator Protein 1 (AP-1) Transcription Factor via Mitogen-activated Protein Kinase (MAPK) Mechanotransduction. Journal of Biological Chemistry, 2016, 291, 7831-7843.	3.4	21
653	2D and 3D Mechanobiology in Human and Nonhuman Systems. ACS Applied Materials & Interfaces, 2016, 8, 21869-21882.	8.0	10
654	Laminar Shear Stress Promotes Nicotine-Induced Inflammation and Hemostatic Expression in Human Endothelial Cells. Cellular and Molecular Bioengineering, 2016, 9, 466-477.	2.1	2
655	Simplifying microfluidic separation devices towards field-detection of blood parasites. Analytical Methods, 2016, 8, 3291-3300.	2.7	32
657	Molecular mechanisms of the angiogenic effects of low-energy shock wave therapy: roles of mechanotransduction. American Journal of Physiology - Cell Physiology, 2016, 311, C378-C385.	4.6	67
658	Progress in cell culture systems for pathological research. Pathology International, 2016, 66, 554-562.	1.3	13
659	Oscillatory flow suppression improves inflammation in chronic venous disease. Journal of Surgical Research, 2016, 205, 238-245.	1.6	18
660	Interstitial flow regulates the angiogenic response and phenotype of endothelial cells in a 3D culture model. Lab on A Chip, 2016, 16, 4189-4199.	6.0	167
661	Hemodynamic modeling of leukocyte and erythrocyte transport and interactions in intracranial aneurysms by a multiphase approach. Journal of Biomechanics, 2016, 49, 3476-3484.	2.1	10
662	Disturbed flow mediated modulation of shear forces on endothelial plane: A proposed model for studying endothelium around atherosclerotic plaques. Scientific Reports, 2016, 6, 27304.	3.3	39
663	AMP-Activated Protein Kinase and Sirtuin 1 Coregulation of Cortactin Contributes to Endothelial Function. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, 2358-2368.	2.4	33

#	ARTICLE	IF	CITATIONS
664	Shear stress, arterial identity and atherosclerosis. Thrombosis and Haemostasis, 2016, 115, 467-473.	3.4	43
665	Fluid flow facilitates inward rectifier K <sup>+</sup> current by convectively restoring [K <sup>+</sup> ] at the cell membrane surface. Scientific Reports, 2016, 6, 39585.	3.3	4
666	An orbital shear platform for real-time, in vitro endothelium characterization. Biotechnology and Bioengineering, 2016, 113, 1336-1344.	3.3	15
667	Evolution of vortical structures in a curved artery model with non-Newtonian blood-analog fluid under pulsatile inflow conditions. Experiments in Fluids, 2016, 57, 1.	2.4	21
668	Neurovascular 4DFlow MRI (Phase Contrast MRA): emerging clinical applications. Neurovascular Imaging, 2016, 2, .	2.4	19
669	Basic Principles of Hemodynamics and Cerebral Aneurysms. World Neurosurgery, 2016, 88, 311-319.	1.3	54
670	Aortic root haemodynamics following David procedure: numerical analysis of 3-dimensional haemodynamics. European Journal of Cardio-thoracic Surgery, 2016, 49, 1588-1598.	1.4	6
671	3D Quantification of Wall Shear Stress and Oscillatory Shear Index Using a Finite-Element Method in 3D CINE PC-MRI Data of the Thoracic Aorta. IEEE Transactions on Medical Imaging, 2016, 35, 1475-1487.	8.9	42
672	Role of biomechanical forces in the natural history of coronary atherosclerosis. Nature Reviews Cardiology, 2016, 13, 210-220.	13.7	193
673	Determination of a shear rate threshold for thrombus formation in intracranial aneurysms. Journal of NeuroInterventional Surgery, 2016, 8, 853-858.	3.3	32
674	Endothelial cells and cathepsins: Biochemical and biomechanical regulation. Biochimie, 2016, 122, 314-323.	2.6	29
675	Low carotid artery wall shear stress is independently associated with brain white-matter hyperintensities and cognitive impairment in older patients. Atherosclerosis, 2016, 247, 78-86.	0.8	30
676	Endothelial Cell Dysfunction and the Pathobiology of Atherosclerosis. Circulation Research, 2016, 118, 620-636.	4.5	2,150
677	Alterations of carotid arterial mechanics preceding the wall thickening in patients with hypertension. Atherosclerosis, 2016, 248, 84-90.	0.8	12
678	Total Bilirubin Levels Predict Subclinical Atherosclerosis in Patients With Prediabetes. Angiology, 2016, 67, 909-915.	1.8	20
679	Resting heart rate associates with one-year risk of major adverse cardiovascular events in patients with acute coronary syndrome after percutaneous coronary intervention. Experimental Biology and Medicine, 2016, 241, 478-484.	2.4	19
680	A Parallel-Plate Flow Chamber for Mechanical Characterization of Endothelial Cells Exposed to Laminar Shear Stress. Cellular and Molecular Bioengineering, 2016, 9, 127-138.	2.1	41
681	Blood flow and endothelial cell phenotype regulation during sprouting angiogenesis. Medical and Biological Engineering and Computing, 2016, 54, 547-558.	2.8	13

#	ARTICLE	IF	CITATIONS
682	Phenomenological and microscopic theories for catch bonds. <i>Journal of Structural Biology</i> , 2017, 197, 50-56.	2.8	50
683	Relation of Iliac Artery Calcium With Adiposity Measures and Peripheral Artery Disease. <i>American Journal of Cardiology</i> , 2017, 119, 1217-1223.	1.6	3
684	Mechanical compression induces VEGFA overexpression in breast cancer via DNMT3A-dependent miR-9 downregulation. <i>Cell Death and Disease</i> , 2017, 8, e2646-e2646.	6.3	56
685	Fibroblast Growth Factor Signaling, Endothelial Homeostasis, and Endothelial Cell to Mesenchymal Transition. , 2017, , 111-127.		0
686	Paving the Way Toward Complex Blood-Brain Barrier Models Using Pluripotent Stem Cells. <i>Stem Cells and Development</i> , 2017, 26, 857-874.	2.1	40
687	Chronic venous insufficiency “a review of pathophysiology, diagnosis, and treatment. <i>JDDG - Journal of the German Society of Dermatology</i> , 2017, 15, 538-556.	0.8	66
688	Mechanotransmission in endothelial cells subjected to oscillatory and multi-directional shear flow. <i>Journal of the Royal Society Interface</i> , 2017, 14, 20170185.	3.4	37
689	Hybrid polymer microfluidic platform to mimic varying vascular compliance and topology. <i>Lab on A Chip</i> , 2017, 17, 2508-2516.	6.0	16
690	Die chronische venöse Insuffizienz “Eine Zusammenfassung der Pathophysiologie, Diagnostik und Therapie. <i>JDDG - Journal of the German Society of Dermatology</i> , 2017, 15, 538-557.	0.8	19
691	Coronary Microcirculatory Dysfunction in Human Cardiomyopathies. <i>Cardiology in Review</i> , 2017, 25, 165-178.	1.4	12
692	Leukocyte Adhesion Under Hemodynamic Flow Conditions. <i>Methods in Molecular Biology</i> , 2017, 1591, 85-100.	0.9	1
693	Fluid shear-induced cathepsin B release in the control of Mac1-dependent neutrophil adhesion. <i>Journal of Leukocyte Biology</i> , 2017, 102, 117-126.	3.3	7
694	The calendar of cytokines: Seasonal variation of circulating cytokines in chronic venous insufficiency. <i>JRSM Cardiovascular Disease</i> , 2017, 6, 204800401772927.	0.7	9
695	Tanshinone IIA Sodium sulfonate regulates antioxidant system, inflammation, and endothelial dysfunction in atherosclerosis by downregulation of CLIC1. <i>European Journal of Pharmacology</i> , 2017, 815, 427-436.	3.5	65
696	Why do we live for much less than 100 years? A fluid mechanics view and approach. <i>Physics of Fluids</i> , 2017, 29, 081903.	4.0	1
697	Endothelial Cell Culture Under Perfusion On A Polyester-Toner Microfluidic Device. <i>Scientific Reports</i> , 2017, 7, 10466.	3.3	20
699	NOTCH1 is a mechanosensor in adult arteries. <i>Nature Communications</i> , 2017, 8, 1620.	12.8	205
700	Impact of flow-mediated dilatation and coronary calcification in providing complementary information on the severity of coronary artery disease. <i>Atherosclerosis</i> , 2017, 267, 146-152.	0.8	6



#	ARTICLE	IF	CITATIONS
701	A PIV COMPARISON OF THE FLOW FIELD AND WALL SHEAR STRESS IN RIGID AND COMPLIANT MODELS OF HEALTHY CAROTID ARTERIES. Journal of Mechanics in Medicine and Biology, 2017, 17, 1750041.	0.7	23
702	Characterization of the in vivo wall shear stress environment of human fetus umbilical arteries and veins. Biomechanics and Modeling in Mechanobiology, 2017, 16, 197-211.	2.8	28
703	Regressive cross-correlation of pressure signals in the region of stenosis: Insights from particle image velocimetry experimentation. Biomedical Signal Processing and Control, 2017, 32, 143-149.	5.7	7
704	Pediatric acute respiratory distress syndrome - current views (Review). Experimental and Therapeutic Medicine, 2017, 15, 1775-1780.	1.8	1
705	A Study of Cardiac Function, Atherosclerosis, and Arrhythmogenicity. , 2017, , 91-125.		1
706	Erectile dysfunction treatment and traditional medicine“can East and West medicine coexist?. Translational Andrology and Urology, 2017, 6, 91-100.	1.4	12
707	Building a better blood-brain barrier. ELife, 2017, 6, .	6.0	3
708	An agent-based model of leukocyte transendothelial migration during atherogenesis. PLoS Computational Biology, 2017, 13, e1005523.	3.2	29
709	Combination of Magnetic Resonance Angiography and Computational Fluid Dynamics May Predict the Risk of Stroke in Patients with Asymptomatic Carotid Plaques. Medical Science Monitor, 2017, 23, 479-488.	1.1	14
710	Primary cilia sensitize endothelial cells to BMP and prevent excessive vascular regression. Journal of Cell Biology, 2018, 217, 1651-1665.	5.2	84
711	Intravenously injected human multilineage-differentiating stress-enduring cells selectively engraft into mouse aortic aneurysms and attenuate dilatation by differentiating into multiple cell types. Journal of Thoracic and Cardiovascular Surgery, 2018, 155, 2301-2313.e4.	0.8	29
712	The Physiological Rationale for Incorporating Pulsatility in Continuous-Flow Left Ventricular Assist Devices. Cardiology in Review, 2018, 26, 294-301.	1.4	10
713	A tunable microfluidic 3D stenosis model to study leukocyte-endothelial interactions in atherosclerosis. APL Bioengineering, 2018, 2, 016103.	6.2	57
714	Mechanisms Underlying Extracorporeal Shockwave Treatment for Ischemic Cardiovascular Disease. Translational Research in Biomedicine, 2018, , 102-108.	0.4	1
715	Possible Ameliorative Effect of Ivabradine on the Autonomic and Left Ventricular Dysfunction Induced by Doxorubicin in Male Rats. Journal of Cardiovascular Pharmacology, 2018, 72, 22-31.	1.9	20
716	3D axial and circumferential wall shear stress from 4D flow MRI data using a finite element method and a laplacian approach. Magnetic Resonance in Medicine, 2018, 79, 2816-2823.	3.0	37
717	Sinus Hemodynamics in Representative Stenotic Native Bicuspid and Tricuspid Aortic Valves: An In-Vitro Study. Fluids, 2018, 3, 56.	1.7	19
718	Computing of Low Shear Stress-Driven Endothelial Gene Network Involved in Early Stages of Atherosclerotic Process. BioMed Research International, 2018, 2018, 1-12.	1.9	12



#	ARTICLE	IF	CITATIONS
719	Muse Cells. <i>Advances in Experimental Medicine and Biology</i> , 2018, , .	1.6	3
720	Muse Cells and Aortic Aneurysm. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1103, 273-291.	1.6	7
721	Nitrosonifedipine, a Photodegradation Product of Nifedipine, Suppresses Pharmacologically Induced Aortic Aneurysm Formation. <i>Pharmacology</i> , 2018, 102, 287-299.	2.2	8
722	Beyond RGD; nanoclusters of syndecan- and integrin-binding ligands synergistically enhance cell/material interactions. <i>Biomaterials</i> , 2018, 187, 81-92.	11.4	22
723	PAR-1 is a novel mechano-sensor transducing laminar flow-mediated endothelial signaling. <i>Scientific Reports</i> , 2018, 8, 15172.	3.3	12
724	Impact of the bicuspid aortic valve on aortic root haemodynamics: three-dimensional computed fluid dynamics simulation. <i>Interactive Cardiovascular and Thoracic Surgery</i> , 2018, 27, 446-454.	1.1	3
725	Hemodynamic Forces in the Endothelium: From Mechanotransduction to Implications on Development of Atherosclerosis. , 2018, , 85-95.		19
726	The Effects of Exercise, Aspirin, and Celecoxib in an Atherogenic Environment. <i>Medicine and Science in Sports and Exercise</i> , 2018, 50, 2033-2039.	0.4	5
727	Expression of Nuclear Lamin Proteins in Endothelial Cells is Sensitive to Cell Passage and Fluid Shear Stress. <i>Cellular and Molecular Bioengineering</i> , 2018, 11, 53-64.	2.1	5
728	Ionizing Radiation Induces Endothelial Inflammation and Apoptosis via p90RSK-Mediated ERK5 S496 Phosphorylation. <i>Frontiers in Cardiovascular Medicine</i> , 2018, 5, 23.	2.4	17
729	Developing a Reliable Mouse Model for Cancer Therapy-Induced Cardiovascular Toxicity in Cancer Patients and Survivors. <i>Frontiers in Cardiovascular Medicine</i> , 2018, 5, 26.	2.4	7
730	Pathophysiological Mechanisms of Chronic Venous Disease and Implications for Venoactive Drug Therapy. <i>International Journal of Molecular Sciences</i> , 2018, 19, 1669.	4.1	140
731	Effects of intermittent pneumatic compression treatment on clinical outcomes and biochemical markers in patients at low mobility with lower limb edema. <i>Journal of Vascular Surgery: Venous and Lymphatic Disorders</i> , 2018, 6, 500-510.	1.6	13
732	Membrane Trafficking in Autophagy. <i>International Review of Cell and Molecular Biology</i> , 2018, 336, 1-92.	3.2	77
733	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
734	A multicenter trial of extracorporeal cardiac shock wave therapy for refractory angina pectoris: report of the highly advanced medical treatment in Japan. <i>Heart and Vessels</i> , 2019, 34, 104-113.	1.2	15
735	Physical Stress as a Factor in Tissue Growth and Remodeling. , 2019, , 417-436.		0
736	Sinus Hemodynamics Variation with Tilted Transcatheter Aortic Valve Deployments. <i>Annals of Biomedical Engineering</i> , 2019, 47, 75-84.	2.5	32

#	ARTICLE	IF	CITATIONS
737	Impact of patient-specific morphologies on sinus flow stasis in transcatheter aortic valve replacement: An in vitro study. Journal of Thoracic and Cardiovascular Surgery, 2019, 157, 540-549.	0.8	53
738	Studying the Response of Aortic Endothelial Cells under Pulsatile Flow Using a Compact Microfluidic System. Analytical Chemistry, 2019, 91, 12077-12084.	6.5	41
739	Pumpless microfluidic devices for generating healthy and diseased endothelia. Lab on A Chip, 2019, 19, 3212-3219.	6.0	22
740	Exercise (Prong-5). , 2019, , 299-329.		0
741	Laminar Wall Shear Stress in Brain Arteriovenous Malformations: Systematic Review of Literature. World Neurosurgery, 2019, 128, e760-e767.	1.3	6
742	Driving complex flow waveforms with a linear voice coil actuator. Biomicrofluidics, 2019, 13, 034101.	2.4	0
743	The role of heart rate and ivabradine in acute heart failure. Monaldi Archives for Chest Disease, 2019, 89, .	0.6	3
744	A Novel Rabbit Model for In-Stent Neoatherosclerosis. International Heart Journal, 2019, 60, 1154-1160.	1.0	4
745	A human-on-a-chip approach to tackling rare diseases. Drug Discovery Today, 2019, 24, 2139-2151.	6.4	29
746	A Novel Fabrication Method for Compliant Silicone Phantoms of Arterial Geometry for Use in Particle Image Velocimetry of Haemodynamics. Applied Sciences (Switzerland), 2019, 9, 3811.	2.5	20
747	Simulation of blood flow past a distal arteriovenous-graft anastomosis at low Reynolds numbers. Physics of Fluids, 2019, 31, 091902.	4.0	10
748	Cholesterol-Lowering Agents. Circulation Research, 2019, 124, 364-385.	4.5	45
749	Association Between Intra-arterial Invasive Central and Peripheral Blood Pressure and Endothelial Function (Assessed by Flow-Mediated Dilatation) in Stable Coronary Artery Disease. American Journal of Hypertension, 2019, 32, 953-959.	2.0	12
750	Local Coronary Flow and Stress Distribution. , 2019, , 521-564.		0
751	Using miniature brain implants in rodents for novel drug discovery. Expert Opinion on Drug Discovery, 2019, 14, 379-386.	5.0	6
752	The influence of resting heart rate on pulse wave velocity measurement is mediated by blood pressure and depends on aortic stiffness levels: insights from the Corinthia study. Physiological Measurement, 2019, 40, 055005.	2.1	36
753	3D simulation of a viscous flow past a compliant model of arteriovenous-graft annastomosis. Computers and Fluids, 2019, 181, 403-415.	2.5	10
754	The Basic Science Behind Low-Intensity Extracorporeal Shockwave Therapy for Erectile Dysfunction: A Systematic Scoping Review of Pre-Clinical Studies. Journal of Sexual Medicine, 2019, 16, 168-194.	0.6	46

#	ARTICLE	IF	CITATIONS
755	Filarial extract of <i>Litomosoides sigmodontis</i> induces a type 2 immune response and attenuates plaque development in hyperlipidemic ApoE <sup>-/-</sup> knockout mice. <i>FASEB Journal</i> , 2019, 33, 6497-6513.	0.5	4
756	Shear Stress Analysis of Synthesis and Nitric Oxide Release from Huvecs Exposed to Supraphysiologic Glucose. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 494, 012060.	0.6	2
757	Coxsackievirus and adenovirus receptor mediates the responses of endothelial cells to fluid shear stress. <i>Experimental and Molecular Medicine</i> , 2019, 51, 1-15.	7.7	12
758	Assessment of the Effects of Bisphenol A on Dopamine Synthesis and Blood Vessels in the Goldfish Brain. <i>International Journal of Molecular Sciences</i> , 2019, 20, 6206.	4.1	12
759	SENCAR stabilizes vascular endothelial cell adherens junctions through interaction with CKAP4. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 546-555.	7.1	88
760	Amnion-derived mesenchymal stem cells improve viability of endothelial cells exposed to shear stress in ePTFE grafts. <i>International Journal of Artificial Organs</i> , 2019, 42, 80-87.	1.4	4
761	Retrograde and oscillatory shear increase across the menopause transition. <i>Physiological Reports</i> , 2019, 7, e13965.	1.7	5
762	In Vitro Cell Models of the Human Blood-Brain Barrier: Demonstrating the Beneficial Influence of Shear Stress on Brain Microvascular Endothelial Cell Phenotype. <i>Neuromethods</i> , 2019, , 71-98.	0.3	3
763	MicroRNA-374b induces endothelial-to-mesenchymal transition and early lesion formation through the inhibition of MAPK7 signaling. <i>Journal of Pathology</i> , 2019, 247, 456-470.	4.5	22
764	ARHGAP18: A Flow-Responsive Gene That Regulates Endothelial Cell Alignment and Protects Against Atherosclerosis. <i>Journal of the American Heart Association</i> , 2019, 8, e010057.	3.7	17
765	Retrograde and oscillatory shear rate in young anabolic androgenic steroid users. <i>Scandinavian Journal of Medicine and Science in Sports</i> , 2019, 29, 422-429.	2.9	8
766	Influence of Distal Stenosis on Blood Flow Through Coronary Serial Stenoses: A Numerical Study. <i>International Journal of Computational Methods</i> , 2019, 16, 1842003.	1.3	7
767	Impact of BASILICA on Sinus and Neo-Sinus Hemodynamics after Valve-in-Valve with and without Coronary Flow. <i>Cardiovascular Revascularization Medicine</i> , 2020, 21, 271-276.	0.8	11
768	Investigation of the hemodynamic flow conditions and blood-induced stresses inside an abdominal aortic aneurysm by means of a SPH numerical model. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2020, 36, e3263.	2.1	5
769	Endothelial function in patients with atrial fibrillation. <i>Annals of Medicine</i> , 2020, 52, 1-11.	3.8	26
770	ABC Transporters at the Blood-Brain Interfaces, Their Study Models, and Drug Delivery Implications in Gliomas. <i>Pharmaceutics</i> , 2020, 12, 20.	4.5	80
771	PET/MRI of atherosclerosis. <i>Cardiovascular Diagnosis and Therapy</i> , 2020, 10, 1120-1139.	1.7	17
772	Assessment of surface roughness and blood rheology on local coronary haemodynamics: a multi-scale computational fluid dynamics study. <i>Journal of the Royal Society Interface</i> , 2020, 17, 20200327.	3.4	12

#	ARTICLE	IF	CITATIONS
773	The Effect of an Atherogenic Diet and Acute Hyperglycaemia on Endothelial Function in Rabbits Is Artery Specific. <i>Nutrients</i> , 2020, 12, 2108.	4.1	5
774	Low Shear Stress Upregulates CX3CR1 Expression by Inducing VCAM-1 via the NF- $\kappa$ B Pathway in Vascular Endothelial Cells. <i>Cell Biochemistry and Biophysics</i> , 2020, 78, 383-389.	1.8	19
775	Lipophagy in atherosclerosis. <i>Clinica Chimica Acta</i> , 2020, 511, 208-214.	1.1	15
776	3D curvature-instructed endothelial flow response and tissue vascularization. <i>Science Advances</i> , 2020, 6, .	10.3	45
777	Peritubular Capillary Rarefaction: An Underappreciated Regulator of CKD Progression. <i>International Journal of Molecular Sciences</i> , 2020, 21, 8255.	4.1	33
778	Effect of Low-Frequency Therapeutic Ultrasound on Induction of Nitric Oxide in CKD: Potential to Prevent Acute Kidney Injury. <i>Kidney Diseases (Basel, Switzerland)</i> , 2020, 6, 453-460.	2.5	1
779	The effect of shear stress reduction on endothelial cells: A microfluidic study of the actin cytoskeleton. <i>Biomicrofluidics</i> , 2020, 14, 024115.	2.4	30
780	Effect of drug-coated balloons versus bare-metal stents on endothelial function in patients with severe lower limb peripheral artery disease. <i>Vascular</i> , 2020, 28, 548-556.	0.9	2
781	Shake It or Shrink It: Mass Transport and Kinetics in Surface Bioassays Using Agitation and Microfluidics. <i>Analytical Chemistry</i> , 2020, 92, 10187-10195.	6.5	28
783	Effects of resveratrol or estradiol on postexercise endothelial function in estrogen-deficient postmenopausal women. <i>Journal of Applied Physiology</i> , 2020, 128, 739-747.	2.5	19
784	Mechanical Regulation Underlies Effects of Exercise on Serotonin-Induced Signaling in the Prefrontal Cortex Neurons. <i>IScience</i> , 2020, 23, 100874.	4.1	10
785	Early Programming of Adult Systemic Essential Hypertension. <i>International Journal of Molecular Sciences</i> , 2020, 21, 1203.	4.1	28
786	An investigation of the relationship between arterial aortic stiffness and coronary slow flow that was detected during coronary angiography. <i>Echocardiography</i> , 2020, 37, 528-535.	0.9	4
787	Effect of obesity on chronic venous insufficiency treatment outcomes. <i>Journal of Vascular Surgery: Venous and Lymphatic Disorders</i> , 2020, 8, 617-628.e1.	1.6	29
788	Biomaterials functionalized with nanoclusters of integrin $\alpha$ 5 $\beta$ 1 and syndecan $\alpha$ 1 $\beta$ 1 binding ligands improve cell adhesion and mechanosensing under shear flow conditions. <i>Journal of Biomedical Materials Research - Part A</i> , 2021, 109, 313-325.	4.0	4
789	Endothelial Dysfunction and Its Clinical Implications. <i>Angiology</i> , 2021, 72, 604-615.	1.8	52
790	Vascular mechanobiology and metabolism. , 2021, , 291-312.		0
791	Evolving determinants of carotid atherosclerosis vulnerability in asymptomatic patients from the MAGNETIC observational study. <i>Scientific Reports</i> , 2021, 11, 2327.	3.3	4

#	ARTICLE	IF	CITATIONS
792	Medical and Revascularization Management of Stable Ischemic Heart Disease: An Overview. International Journal of Angiology, 2021, 30, 083-090.	0.6	0
793	Coronary arterial geometry: A comprehensive comparison of two imaging modalities. International Journal for Numerical Methods in Biomedical Engineering, 2021, 37, e3442.	2.1	3
794	The effect of microgravity on the human venous system and blood coagulation: a systematic review. Experimental Physiology, 2021, 106, 1149-1158.	2.0	31
796	Simulation of blood flow past distal arteriovenous-graft anastomosis with intimal hyperplasia. Physics of Fluids, 2021, 33, 051905.	4.0	6
797	Low-intensity shock wave therapy for the treatment of vasculogenic erectile dysfunction: a narrative review of technical considerations and treatment outcomes. Translational Andrology and Urology, 2021, 10, 2617-2628.	1.4	4
798	Endothelial Dysfunction in Atherosclerotic Cardiovascular Diseases and Beyond: From Mechanism to Pharmacotherapies. Pharmacological Reviews, 2021, 73, 924-967.	16.0	359
800	<i>LXN</i> deficiency regulates cytoskeleton remodelling by promoting proteolytic cleavage of Filamin A in vascular endothelial cells. Journal of Cellular and Molecular Medicine, 2021, 25, 6815-6827.	3.6	3
801	EndMT: Potential Target of H <sub>2</sub> S against Atherosclerosis. Current Medicinal Chemistry, 2021, 28, 3666-3680.	2.4	9
802	Mathematical Modeling and Numerical Simulation of Atherosclerotic Plaque Progression Based on Fluid-Structure Interaction. Journal of Mathematical Fluid Mechanics, 2021, 23, 1.	1.0	3
803	Wall shear stress gradient is independently associated with middle cerebral artery aneurysm development: a case-control CFD patient-specific study based on 77 patients. BMC Neurology, 2021, 21, 281.	1.8	12
804	The MEK5/ERK5 Pathway in Health and Disease. International Journal of Molecular Sciences, 2021, 22, 7594.	4.1	34
805	In Vitro Flow Chamber Design for the Study of Endothelial Cell (Patho)Physiology. Journal of Biomechanical Engineering, 2022, 144, .	1.3	6
806	Detrimental or beneficial: Role of endothelial ENaC in vascular function. Journal of Cellular Physiology, 2022, 237, 29-48.	4.1	10
807	Mesenchymal Stromal Cell-Derived Extracellular Vesicles Pass through the Filtration Barrier and Protect Podocytes in a 3D Glomerular Model under Continuous Perfusion. Tissue Engineering and Regenerative Medicine, 2021, 18, 549-560.	3.7	10
808	The iterative lipid impact on inflammation in atherosclerosis. Current Opinion in Lipidology, 2021, 32, 286-292.	2.7	13
809	Simvastatin increases circulating endothelial progenitor cells and inhibits the formation of intracranial aneurysms in rats with diet-induced hyperhomocysteinemia. Neuroscience Letters, 2021, 760, 136072.	2.1	2
810	An In Vivo Data-Based Computational Study on Sitting-Induced Hemodynamic Changes in the External Iliac Artery. Journal of Biomechanical Engineering, 2022, 144, .	1.3	6
811	Topological Optimization of Auxetic Coronary Stents Considering Hemodynamics. Frontiers in Bioengineering and Biotechnology, 2021, 9, 728914.	4.1	12

#	ARTICLE	IF	CITATIONS
812	Red blood cells under flow show maximal ATP release for specific hematocrit. Biophysical Journal, 2021, 120, 4819-4831.	0.5	6
813	In vitro pulsatile flow study in compliant and rigid ascending aorta phantoms by stereo particle image velocimetry. Medical Engineering and Physics, 2021, 96, 81-90.	1.7	3
814	Mimicking Human Kidney: Research Towards Better Solutions for Kidney Failure. Studies in Systems, Decision and Control, 2021, , 293-312.	1.0	2
815	Flow-adapted vascular systems: mimicking the vascular network to predict clinical response to radiation. , 2021, , 129-146.		0
816	Biomechanical Modulation of Endothelial Phenotype: Implications for Health and Disease. Handbook of Experimental Pharmacology, 2006, , 79-95.	1.8	40
817	Channels across Endothelial Cells. , 2006, , 251-266.		3
818	Ion Channels in Shear Stress Sensing in Vascular Endothelium. , 2007, , 155-170.		2
819	Modelling the Early Stages of Atherosclerosis. , 2007, , 263-274.		2
820	Arterial Circulation and Disease Processes. , 2010, , 269-311.		1
821	Leucocyte Adhesion Under Haemodynamic Flow Conditions. Methods in Molecular Biology, 2010, 616, 31-47.	0.9	5
822	Oxidative Stress in Vascular Disease. , 2010, , 211-235.		3
823	Pathophysiology of Carotid Atherosclerosis. , 2011, , 27-39.		5
824	Mechanical Homeostasis of Cardiovascular Tissue. , 2008, , 371-391.		8
825	Vascular Endothelial Responses to Disturbed Flow: Pathologic Implications for Atherosclerosis. , 2008, , 469-496.		2
826	Mechanical Stretching of Cells of Different Tissues: The Role of Mediators of Innate Immunity. , 2012, , 35-58.		2
827	Acute Coronary Syndromes: Pathophysiology and Preventive Priorities. Thrombosis and Haemostasis, 1999, 82, 997-1004.	3.4	37
828	A device for real-time live-cell microscopy during dynamic dual-modal mechanostimulation. Proceedings of SPIE, 2017, , .	0.8	2
830	MAGI1 as a link between endothelial activation and ER stress drives atherosclerosis. JCI Insight, 2019, 4, .	5.0	45

#	ARTICLE	IF	CITATIONS
831	Laminar flow inhibits TNF-induced ASK1 activation by preventing dissociation of ASK1 from its inhibitor 14-3-3. Journal of Clinical Investigation, 2001, 107, 917-923.	8.2	106
832	Upregulation of TRAF-3 by shear stress blocks CD40-mediated endothelial activation. Journal of Clinical Investigation, 2001, 108, 1451-1458.	8.2	24
833	Upregulation of TRAF-3 by shear stress blocks CD40-mediated endothelial activation. Journal of Clinical Investigation, 2001, 108, 1451-1458.	8.2	70
834	Fluid shear stress inhibits vascular inflammation by decreasing thioredoxin-interacting protein in endothelial cells. Journal of Clinical Investigation, 2005, 115, 733-738.	8.2	210
835	Fluid shear stress inhibits vascular inflammation by decreasing thioredoxin-interacting protein in endothelial cells. Journal of Clinical Investigation, 2005, 115, 733-738.	8.2	105
836	Integration of flow-dependent endothelial phenotypes by Kruppel-like factor 2. Journal of Clinical Investigation, 2005, 116, 49-58.	8.2	594
837	Lymphatic regulator PROX1 determines Schlemm's canal integrity and identity. Journal of Clinical Investigation, 2014, 124, 3960-3974.	8.2	141
838	Angiotensin II promotes atherosclerotic lesions and aneurysms in apolipoprotein E-deficient mice. Journal of Clinical Investigation, 2000, 105, 1605-1612.	8.2	1,159
839	Sites of Ca <sup>2+</sup> wave initiation move with caveolae to the trailing edge of migrating cells. Journal of Cell Science, 2002, 115, 475-484.	2.0	113
840	Increased Inlet Blood Flow Velocity Predicts Low Wall Shear Stress in the Cephalic Arch of Patients with Brachiocephalic Fistula Access. PLoS ONE, 2016, 11, e0152873.	2.5	23
841	Fluid shear stress induces epithelial-mesenchymal transition (EMT) in Hep-2 cells. Oncotarget, 2016, 7, 32876-32892.	1.8	34
842	The Role of (Modified) Lipoproteins in Vascular Function: A Duet Between Monocytes and the Endothelium. Current Medicinal Chemistry, 2019, 26, 1594-1609.	2.4	19
843	The biophysical role of hemodynamics in the pathogenesis of cerebral aneurysm formation and rupture. Neurosurgical Focus, 2019, 47, E11.	2.3	65
844	Lower wall shear rate of the common carotid artery in treated type 2 diabetes mellitus with metabolic syndrome. Physiological Research, 2009, 58, 185-191.	0.9	10
845	Regulation of Cell Signaling and Function by Endothelial Caveolins: Implications in Disease. Translational Medicine (Sunnyvale, Calif ), 2012, 02, .	0.4	6
846	Grounding the Human Body during Yoga Exercise with a Grounded Yoga Mat Reduces Blood Viscosity. Open Journal of Preventive Medicine, 2015, 05, 159-168.	0.3	8
847	Prevalence of myocardial bridging associated with coronary endothelial dysfunction in patients with chest pain and non-obstructive coronary artery disease. EuroIntervention, 2020, 15, 1262-1268.	3.2	34
848	Structure-function relation in the coronary artery tree: from fluid dynamics to arterial bifurcations. EuroIntervention, 2010, 6, J10-J15.	3.2	27



#	ARTICLE	IF	CITATIONS
849	Atheroma and coronary bifurcations: before and after stenting. <i>EuroIntervention</i> , 2010, 6, J24-J30.	3.2	13
850	An intravascular ultrasound comparison of left anterior descending artery/first diagonal branch versus distal left main coronary artery bifurcation lesions. <i>EuroIntervention</i> , 2013, 8, 1040-1046.	3.2	13
851	The edge vascular response following implantation of the Absorb everolimus-eluting bioresorbable vascular scaffold and the XIENCE V metallic everolimus-eluting stent. First serial follow-up assessment at six months and two years: insights from the first-in-man ABSORB Cohort B and SPIRIT II trials. <i>EuroIntervention</i> , 2013, 9, 709-720.	3.2	17
852	Different Effects of Orbital Shear Stress on Vascular Endothelial Cells: Comparison with the Results of In Vivo Study with Rats. <i>Vascular Specialist International</i> , 2015, 31, 33-40.	0.6	10
853	Disturbed flow-induced FAK K152 SUMOylation initiates the formation of pro-inflammation positive feedback loop by inducing reactive oxygen species production in endothelial cells. <i>Free Radical Biology and Medicine</i> , 2021, 177, 404-418.	2.9	8
854	Modelling Human Physiology on-Chip: Historical Perspectives and Future Directions. <i>Micromachines</i> , 2021, 12, 1250.	2.9	9
855	Pathobiology of Vascular Disease. , 2001, , 987-1004.		0
856	Arterial structure and function and blockade of the renin-angiotensin system in hypertension. , 2001, , 105-127.		0
857	Kinase Signaling in the Cardiovascular System. , 2001, , 657-677.		0
858	Endothelial Changes in Hypertension. <i>Developments in Cardiovascular Medicine</i> , 2002, , 83-94.	0.1	0
859	What do cardiologists want from vascular ultrasound?. , 2003, , 3-27.		0
860	Endothelial Cell Apoptosis Under Fluid Flow. , 2003, , 289-296.		0
861	Endothelial Function in the Stress Echocardiography Laboratory. , 2003, , 455-467.		0
862	Pathophysiology of Human Atherosclerosis. , 2003, , .		0
863	Blood pressure control in chronic hemodialysis patients. , 2004, , 741-764.		0
864	Application of Biomechanical Forces on Endothelial Cells. , 2004, , 93-101.		0
866	Pathobiology of the asymptomatic atherosclerotic carotid plaque. , 2007, , 19-38.		0
867	Pathobiology of Vascular Disease. , 2008, , 1317-1336.		0

#	ARTICLE	IF	CITATIONS
868	Cellular and Molecular Effects of Mechanical Stretch on Vascular Cells. , 2010, , 193-217.		1
869	Drug Therapy and Follow-Up. , 2011, , 563-631.		0
870	Physical Stress as a Factor in Tissue Growth and Remodeling. , 2011, , 493-515.		0
872	MEK5/ERK5. , 2012, , 1065-1074.		0
873	The effect of aerobic training on endothelium-dependent vasodilatation in patients with coronary artery disease who were revascularized and young men. Health, 2013, 05, 1706-1711.	0.3	0
875	Vascular Fluid Mechanics in the Regulation of Endothelial Function. , 2013, , 72-100.		0
876	NON-SPECIFIC CONGENITAL CONNECTIVE TISSUE DISORDERS AS AN INDEPENDENT PREDICTOR OF STRUCTURAL AND FUNCTIONAL ARTERIAL CHANGES. Cardiovascular Therapy and Prevention (Russian) Tj ETQq0 0 0 4gBT / Overlock 10		0
877	Regulation of Cellular Signalling by Thioredoxin. , 2015, , 255-274.		0
878	MEK5/ERK5. , 2016, , 1-23.		0
879	Microcirculatory Dysfunction. , 2017, , 39-53.		0
880	Intracoronary Shear Stress and CT Characteristics of Vulnerable Coronary Plaques. Journal of Interdisciplinary Medicine, 2017, 2, 242-244.	0.1	1
881	The Function of Platelet Endothelial Cell Ad-hesion Molecule-1 (PECAM-1) in Mechanotransduction. Pharmacy Information, 2018, 07, 21-26.	0.0	0
882	MEK5/ERK5. , 2018, , 3052-3074.		0
883	Pathogenetic substantiation of phlebotropic therapy for chronic venous diseases. Hospital-replacing Technologies Ambulatory Surgery, 2019, , 19-33.	0.2	2
884	How Physical Factors Coordinate Virus Infection: A Perspective From Mechanobiology. Frontiers in Bioengineering and Biotechnology, 2021, 9, 764516.	4.1	0
885	Trimetazidine Improves the Outcome of EECF Therapy in Patients with Refractory Angina Pectoris. Medicinski Arhiv = Medical Archives = Archives De MÃ©decine, 2020, 74, 199.	0.9	5
886	Anatomy of the Carotid Artery. , 2020, , 7-31.		0
887	Cardiac function in patients with coronary artery disease prepared for coronary angiography. Emergency Medical Service, 2020, 7, 5-12.	0.1	0

#	ARTICLE	IF	CITATIONS
888	Vascular Cell Responses to Fluid Shear Stress. , 2006, , 371-394.		0
889	Cathepsins in Atherosclerosis. , 0, , 173-191.		3
890	Novel approaches to treat oxidative stress and cardiovascular diseases. Transactions of the American Clinical and Climatological Association, 2007, 118, 209-14.	0.5	26
891	Isolation of endothelial cells and vascular smooth muscle cells from internal mammary artery tissue. Ochsner Journal, 2007, 7, 133-6.	1.1	9
893	Nitric Oxide and the Biological Cascades Underlying Increased Neurogenesis, Enhanced Learning Ability, and Academic Ability as an Effect of Increased Bouts of Physical Activity. International Journal of Exercise Science, 2012, 5, 245-275.	0.5	0
894	Mechanical strain triggers endothelial-to-mesenchymal transition of the endocardium in the immature heart. Pediatric Research, 2022, 92, 721-728.	2.3	1
895	PGC1 $\alpha$ Regulates the Endothelial Response to Fluid Shear Stress via Telomerase Reverse Transcriptase Control of Heme Oxygenase-1. Arteriosclerosis, Thrombosis, and Vascular Biology, 2022, 42, 19-34.	2.4	9
896	Mechanical and chemical cues synergistically promote human venous smooth muscle cell osteogenesis through integrin $\alpha$ 5 $\beta$ 1 $\rightarrow$ ERK1/2 signaling: A cell model of hemodialysis fistula calcification. FASEB Journal, 2021, 35, e22042.	0.5	0
897	Endothelial cells: potential novel regulators of renal inflammation. American Journal of Physiology - Renal Physiology, 2022, 322, F309-F321.	2.7	15
898	Generation of dynamic vortices in a microfluidic system incorporating stenosis barrier by tube oscillation. Lab on A Chip, 2022, 22, 1917-1928.	6.0	6
899	Effects of passive and active leg movements to interrupt sitting in mild hypercapnia on cardiovascular function in healthy adults. Journal of Applied Physiology, 2022, 132, 874-887.	2.5	8
900	Experimental and computational study of pulsatile flow characteristics in Romanesque and gothic aortic arch models. Medical Engineering and Physics, 2022, 102, 103784.	1.7	6
901	The Effects of the Mechanical Properties of Vascular Grafts and an Anisotropic Hyperelastic Aortic Model on Local Hemodynamics during Modified Blalock $\rightarrow$ Taussig Shunt Operation, Assessed Using FSI Simulation. Materials, 2022, 15, 2719.	2.9	5
902	Automatically hemodynamic analysis of AAA from CT images based on deep learning and CFD approaches. Journal of Physics: Conference Series, 2021, 2119, 012069.	0.4	1
903	TXNIP: A Double-Edged Sword in Disease and Therapeutic Outlook. Oxidative Medicine and Cellular Longevity, 2022, 2022, 1-14.	4.0	34
909	Pathophysiology of deep vein thrombosis. Clinical and Experimental Medicine, 2023, 23, 645-654.	3.6	21
910	Acute coronary syndromes: Virchow's triad revisited. Blood Coagulation and Fibrinolysis, 2003, 14, 605-25.	1.0	17
911	Effects of Pulsatility on Arterial Endothelial and Smooth Muscle Cells. Cells Tissues Organs, 2023, 212, 272-284.	2.3	2

#	ARTICLE	IF	CITATIONS
912	Probing the possibility of lesion formation/progression in vicinity of a primary atherosclerotic plaque: A fluid–solid interaction study and angiographic evidences. International Journal for Numerical Methods in Biomedical Engineering, 2022, , e3605.	2.1	1
913	The Distinct Role of the HDL Receptor SR-BI in Cholesterol Homeostasis of Human Placental Arterial and Venous Endothelial Cells. International Journal of Molecular Sciences, 2022, 23, 5364.	4.1	2
914	Understanding the Pathobiology of Pulmonary Hypertension Due to Left Heart Disease. Circulation Research, 2022, 130, 1382-1403.	4.5	13
918	What happens after they survive? The role of anticoagulants and antiplatelets in IVC injuries. Trauma Surgery and Acute Care Open, 2022, 7, e000923.	1.6	1
919	Numerical simulation to study the impact of compliance mismatch between artificial and host blood vessel on hemodynamics. Medicine in Novel Technology and Devices, 2022, 15, 100152.	1.6	5
920	Laminar shear stress alleviates monocyte adhesion and atherosclerosis development via miR-29b-3p/CX3CL1 axis regulation. Journal of Cell Science, 0, , .	2.0	2
921	Interaction of von Willebrand factor with blood cells in flow models: a systematic review. Blood Advances, 2022, 6, 3979-3990.	5.2	3
922	Mechanotransduction in Endothelial Cells in Vicinity of Cancer Cells. Cellular and Molecular Bioengineering, 0, , .	2.1	1
923	A Fluid-Structure Interaction Analysis of Blood Clot Motion in a Branch of Pulmonary Arteries. Cardiovascular Engineering and Technology, 0, , .	1.6	1
924	Endothelial dysfunction as the typical pathological state. Regional Blood Circulation and Microcirculation, 2022, 21, 4-15.	0.3	6
925	Polymer–Metal Composite Healthcare Materials: From Nano to Device Scale. Journal of Composites Science, 2022, 6, 218.	3.0	4
926	Sustained-Release Ivabradine Hemisulfate in Patients With Systolic Heart Failure. Journal of the American College of Cardiology, 2022, 80, 584-594.	2.8	2
927	ELTD1 is present in extracellular vesicles derived from endothelial cells as a cleaved extracellular domain which induces in vivo angiogenesis. , 2022, 1, .		0
928	Design, development and preliminary assessment in a porcine model of a novel peripheral intravenous catheter aimed at reducing early failure rates. Journal of Vascular Access, 0, , 112972982211277.	0.9	0
929	Multiphase flow hemodynamic evaluation of vertebral artery stenosis lesions and plaque stability. Bio-Medical Materials and Engineering, 2022, , 1-14.	0.6	1
930	Vascular Transcriptomics: Investigating Endothelial Activation and Vascular Dysfunction Using Blood Outgrowth Endothelial Cells, Organ–Chips, and RNA Sequencing. Current Protocols, 2022, 2, .	2.9	0
931	Label-free measurement of wall shear stress in the brain venule and arteriole using dual-wavelength third-harmonic-generation line-scanning imaging. Optics Letters, 2022, 47, 5618.	3.3	3
932	The impact of exercise training on endothelial function in postmenopausal women: A systematic review. Experimental Physiology, 0, , .	2.0	3

#	ARTICLE	IF	CITATIONS
933	Luminal endothelialization of small caliber silk tubular graft for vascular constructs engineering. <i>Frontiers in Cardiovascular Medicine</i> , 0, 9, .	2.4	2
934	A computational study of aortic reconstruction in single ventricle patients. <i>Biomechanics and Modeling in Mechanobiology</i> , 0, , .	2.8	0
935	Application of Shear Stress to Endothelial Cells Using a Parallel Plate Flow Chamber. <i>Methods in Molecular Biology</i> , 2023, , 81-90.	0.9	0
937	Effects of shear stress on vascular endothelial functions in atherosclerosis and potential therapeutic approaches. <i>Biomedicine and Pharmacotherapy</i> , 2023, 158, 114198.	5.6	15
939	Optimal Heart Rate Control Improves Long-Term Prognosis of Decompensated Heart Failure with Reduced Ejection Fraction. <i>Medicina (Lithuania)</i> , 2023, 59, 348.	2.0	2
940	Prolonged sitting and peripheral vascular function: potential mechanisms and methodological considerations. <i>Journal of Applied Physiology</i> , 2023, 134, 810-822.	2.5	3
941	Caveolae Mechanotransduction at the Interface between Cytoskeleton and Extracellular Matrix. <i>Cells</i> , 2023, 12, 942.	4.1	10
942	The Role of Shear Stress in Coronary Artery Disease. <i>Current Topics in Medicinal Chemistry</i> , 2023, 23, 2132-2157.	2.1	3
943	Restoration of normal blood flow in atherosclerotic arteries promotes plaque stabilization. <i>IScience</i> , 2023, 26, 106760.	4.1	0
944	Neuropilin-1 interacts with VE-cadherin and TGFBR2 to stabilize adherens junctions and prevent activation of endothelium under flow. <i>Science Signaling</i> , 2023, 16, .	3.6	5
945	Identification and validation of G protein-coupled receptors modulating flow-dependent signaling pathways in vascular endothelial cells. <i>Frontiers in Molecular Biosciences</i> , 0, 10, .	3.5	0
946	Differential expression of Dusp1 and immediate early response genes in the hippocampus of rats, subjected to forced swim test. <i>Scientific Reports</i> , 2023, 13, .	3.3	1
947	The VE-cadherin/AmotL2 mechanosensory pathway suppresses aortic inflammation and the formation of abdominal aortic aneurysms. , 2023, 2, 629-644.		4
948	Endothelial mechanobiology in atherosclerosis. <i>Cardiovascular Research</i> , 2023, 119, 1656-1675.	3.8	13
949	Diabetes and Atherosclerosis. <i>Contemporary Cardiology</i> , 2023, , 257-306.	0.1	0
950	Effect of Aortic Valve Opening Pattern on Endothelial Function After Continuous-Flow Left Ventricular Assist Device Implantation. <i>ASAIO Journal</i> , 0, , .	1.6	0
951	Design of Blood Vessel Models using Magneticâ€Responsive Vascular Platforms. <i>Advanced Materials Technologies</i> , 2023, 8, .	5.8	0
952	Impact of disturbed flow and arterial stiffening on mechanotransduction in endothelial cells. <i>Biomechanics and Modeling in Mechanobiology</i> , 0, , .	2.8	0

#	ARTICLE	IF	CITATIONS
953	Role of blood flow in endothelial functionality: a review. Frontiers in Cell and Developmental Biology, 0, 11, .	3.7	2
954	Inflama��o Coron��ria Avaliada pela Atenua��o de Gordura Pericoron��ria na Tomografia Computadorizada e Eleva��o de Citocinas em Usu��rios Jovens de Esteroides Anab��licos Androg��nicos. Arquivos Brasileiros De Cardiologia, 2023, 120, .	0.8	0
955	Tissue-specific Cre driver mice to study vascular diseases. Vascular Pharmacology, 2023, 153, 107241.	2.1	0
956	Endothelial dysfunction and cardiovascular diseases: The role of human induced pluripotent stem cells and tissue engineering. Journal of Biomedical Materials Research - Part A, 0, , .	4.0	0
957	Mitochondrial Dysfunction in Endothelial Progenitor Cells: Unraveling Insights from Vascular Endothelial Cells. Biology, 2024, 13, 70.	2.8	0
958	Obese patients with CEAP (clinical, etiology, anatomy, pathophysiology) C2 and C3 disease show enhanced symptom improvement after endovenous thermal ablation. Journal of Vascular Surgery: Venous and Lymphatic Disorders, 2024, , 101873.	1.6	0