

# Jeng-Jiann Chiu

## List of Publications by Year in descending order

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64  
papers

5,702  
citations

101543

36  
h-index

133252

59  
g-index

64  
all docs

64  
docs citations

64  
times ranked

8772  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of Disturbed Flow on Vascular Endothelium: Pathophysiological Basis and Clinical Perspectives. <i>Physiological Reviews</i> , 2011, 91, 327-387.	28.8	1,661
2	Integrin-YAP/TAZ-JNK cascade mediates atheroprotective effect of unidirectional shear flow. <i>Nature</i> , 2016, 540, 579-582.	27.8	456
3	MicroRNA-21 targets peroxisome proliferators-activated receptor- $\beta$ in an autoregulatory loop to modulate flow-induced endothelial inflammation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 10355-10360.	7.1	303
4	Regulation of Vascular Smooth Muscle Cell Turnover by Endothelial Cell-Secreted MicroRNA-126. <i>Circulation Research</i> , 2013, 113, 40-51.	4.5	223
5	Vascular endothelial responses to altered shear stress: Pathologic implications for atherosclerosis. <i>Annals of Medicine</i> , 2009, 41, 19-28.	3.8	194
6	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
7	Tumor cell cycle arrest induced by shear stress: Roles of integrins and Smad. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 3927-3932.	7.1	173
8	Shear stress inhibits adhesion molecule expression in vascular endothelial cells induced by coculture with smooth muscle cells. <i>Blood</i> , 2003, 101, 2667-2674.	1.4	148
9	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
10	Differential regulations of fibronectin and laminin in Smad2 activation in vascular endothelial cells in response to disturbed flow. <i>Journal of Biomedical Science</i> , 2018, 25, 1.	7.0	115
11	Analysis of the effect of disturbed flow on monocytic adhesion to endothelial cells. <i>Journal of Biomechanics</i> , 2003, 36, 1883-1895.	2.1	97
12	A model for studying the effect of shear stress on interactions between vascular endothelial cells and smooth muscle cells. <i>Journal of Biomechanics</i> , 2004, 37, 531-539.	2.1	95
13	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
14	Endothelial exposure to hypoxia induces Egr-1 expression involving PKC $\beta$ -mediated Ras/Raf-1/ERK1/2 pathway. <i>Journal of Cellular Physiology</i> , 2001, 188, 304-312.	4.1	94
15	Mechanical regulation of cancer cell apoptosis and autophagy: Roles of bone morphogenetic protein receptor, Smad1/5, and p38 MAPK. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2013, 1833, 3124-3133.	4.1	90
16	Matrix stiffness determines the phenotype of vascular smooth muscle cell in vitro and in vivo: Role of DNA methyltransferase 1. <i>Biomaterials</i> , 2018, 155, 203-216.	11.4	88
17	Shear Stress Induces Synthetic-to-Contractile Phenotypic Modulation in Smooth Muscle Cells via Peroxisome Proliferator-Activated Receptor $\beta$ Activations by Prostacyclin Released by Sheared Endothelial Cells. <i>Circulation Research</i> , 2009, 105, 471-480.	4.5	86
18	Atherosclerosis and flow: roles of epigenetic modulation in vascular endothelium. <i>Journal of Biomedical Science</i> , 2019, 26, 56.	7.0	86

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19	Synergistic roles of platelet-derived growth factor-BB and interleukin-1 $\beta$ in phenotypic modulation of human aortic smooth muscle cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 2665-2670.	7.1	83
20	Synergism of biochemical and mechanical stimuli in the differentiation of human placenta-derived multipotent cells into endothelial cells. <i>Journal of Biomechanics</i> , 2008, 41, 813-821.	2.1	83
21	Oscillatory Flow-induced Proliferation of Osteoblast-like Cells Is Mediated by $\alpha$ 2 $\beta$ 1 and $\alpha$ 5 $\beta$ 1 Integrins through Synergistic Interactions of Focal Adhesion Kinase and Shc with Phosphatidylinositol 3-Kinase and the Akt/mTOR/p70S6K Pathway. <i>Journal of Biological Chemistry</i> , 2010, 285, 30-42.	3.4	82
22	Phosphatidylinositol 3-kinase/Akt pathway is involved in transforming growth factor- $\beta$ 1-induced phenotypic modulation of 10T1/2 cells to smooth muscle cells. <i>Cellular Signalling</i> , 2006, 18, 1270-1278.	3.6	78
23	Cobra CRISP Functions as an Inflammatory Modulator via a Novel Zn <sup>2+</sup> - and Heparan Sulfate-dependent Transcriptional Regulation of Endothelial Cell Adhesion Molecules. <i>Journal of Biological Chemistry</i> , 2010, 285, 37872-37883.	3.4	77
24	Mechanical regulation of epigenetics in vascular biology and pathobiology. <i>Journal of Cellular and Molecular Medicine</i> , 2013, 17, 437-448.	3.6	75
25	Neutrophils, lymphocytes, and monocytes exhibit diverse behaviors in transendothelial and subendothelial migrations under coculture with smooth muscle cells in disturbed flow. <i>Blood</i> , 2006, 107, 1933-1942.	1.4	72
26	Integrin-Mediated Expression of Bone Formation-Related Genes in Osteoblast-Like Cells in Response to Fluid Shear Stress: Roles of Extracellular Matrix, Shc, and Mitogen-Activated Protein Kinase. <i>Journal of Bone and Mineral Research</i> , 2008, 23, 1140-1149.	2.8	71
27	Mechanisms of induction of endothelial cell E-selectin expression by smooth muscle cells and its inhibition by shear stress. <i>Blood</i> , 2007, 110, 519-528.	1.4	67
28	Roles of microRNAs in atherosclerosis and restenosis. <i>Journal of Biomedical Science</i> , 2012, 19, 79.	7.0	66
29	BMP-4 Induction of Arrest and Differentiation of Osteoblast-Like Cells via p21 <sup>CIP1</sup> and p27 <sup>KIP1</sup> Regulation. <i>Molecular Endocrinology</i> , 2009, 23, 1827-1838.	3.7	59
30	MicroRNA Mediation of Endothelial Inflammatory Response to Smooth Muscle Cells and Its Inhibition by Atheroprotective Shear Stress. <i>Circulation Research</i> , 2015, 116, 1157-1169.	4.5	57
31	Shear Stress Inhibits Smooth Muscle Cell-Induced Inflammatory Gene Expression in Endothelial Cells. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2005, 25, 963-969.	2.4	56
32	MicroRNA-10a is crucial for endothelial response to different flow patterns via interaction of retinoid acid receptors and histone deacetylases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 2072-2077.	7.1	51
33	Focal TLR4 activation mediates disturbed flow-induced endothelial inflammation. <i>Cardiovascular Research</i> , 2020, 116, 226-236.	3.8	50
34	Endothelial progenitors promote hepatocarcinoma intrahepatic metastasis through monocyte chemotactic protein-1 induction of microRNA-21. <i>Gut</i> , 2015, 64, 1132-1147.	12.1	45
35	Inhibition of miR-21 alleviated cardiac perivascular fibrosis via repressing EndMT in T1DM. <i>Journal of Cellular and Molecular Medicine</i> , 2020, 24, 910-920.	3.6	43
36	Three-dimensional forces exerted by leukocytes and vascular endothelial cells dynamically facilitate diapedesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 133-138.	7.1	42

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37	The inhibition of TNF- $\alpha$ -induced E-selectin expression in endothelial cells via the JNK/NF- $\kappa$ B pathways by highly N-acetylated chitoooligosaccharides. <i>Biomaterials</i> , 2007, 28, 1355-1366.	11.4	40
38	Induction of microRNA-10a using retinoic acid receptor- $\alpha$ and retinoid x receptor- $\alpha$ agonists inhibits atherosclerotic lesion formation. <i>Atherosclerosis</i> , 2018, 271, 36-44.	0.8	26
39	Modulation of chemotactic and pro-inflammatory activities of endothelial progenitor cells by hepatocellular carcinoma. <i>Cellular Signalling</i> , 2012, 24, 779-793.	3.6	25
40	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. <i>Journal of Biomedical Science</i> , 2005, 12, 481-502.	7.0	21
41	Protein kinase C- $\delta$ and - $\zeta$ coordinate flow-induced directionality and deformation of migratory human blood T-lymphocytes. <i>Journal of Molecular Cell Biology</i> , 2014, 6, 458-472.	3.3	14
42	Activation of PPAR- $\alpha$ induces cell cycle arrest and inhibits transforming growth factor- $\beta$ 1 induction of smooth muscle cell phenotype in 10T1/2 mesenchymal cells. <i>Cellular Signalling</i> , 2013, 25, 1252-1263.	3.6	12
43	Endothelial Yin Yang 1 Phosphorylation at S118 Induces Atherosclerosis Under Flow. <i>Circulation Research</i> , 2021, 129, 1158-1174.	4.5	10
44	MicroRNA-21 and Venous Neointimal Hyperplasia of Dialysis Vascular Access. <i>Clinical Journal of the American Society of Nephrology: CJASN</i> , 2018, 13, 1712-1720.	4.5	9
45	Convergence of physical and chemical signaling in the modulation of vascular smooth muscle cell cycle and proliferation by fibrillar collagen-regulated P66Shc. <i>Biomaterials</i> , 2012, 33, 6728-6738.	11.4	7
46	Leukocyte-Endothelium Interaction: Measurement by Laser Tweezers Force Spectroscopy. <i>Cardiovascular Engineering (Dordrecht, Netherlands)</i> , 2006, 6, 111-117.	1.0	6
47	Focal adhesion kinase phosphorylation in flow-activation of endothelial NF- $\kappa$ B. Focus on Focal adhesion kinase modulates activation of NF- $\kappa$ B by flow in endothelial cells. <i>American Journal of Physiology - Cell Physiology</i> , 2009, 297, C800-C801.	4.6	6
48	$\beta$ 2-Integrin and Notch-1 differentially regulate CD34+CD31+ cell plasticity in vascular niches. <i>Cardiovascular Research</i> , 2012, 96, 296-307.	3.8	6
49	Low Levels of MicroRNA-10a in Cardiovascular Endothelium and Blood Serum Are Related to Human Atherosclerotic Disease. <i>Cardiology Research and Practice</i> , 2021, 2021, 1-7.	1.1	6
50	Regulation of fibrillar collagen-mediated smooth muscle cell proliferation in response to chemical stimuli by telomere reverse transcriptase through c-Myc. <i>Biomaterials</i> , 2014, 35, 3829-3839.	11.4	5
51	Mechanoresponsive Smad5 Enhances MiR-487a Processing to Promote Vascular Endothelial Proliferation in Response to Disturbed Flow. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 647714.	3.7	5
52	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
53	Reduction in MicroRNA-4488 Expression Induces NF- $\kappa$ B Translocation in Venous Endothelial Cells Under Arterial Flow. <i>Cardiovascular Drugs and Therapy</i> , 2021, 35, 61-71.	2.6	4
54	Hemodynamics-Based Strategy of Using Retinoic Acid Receptor and Retinoid X Receptor Agonists to Induce MicroRNA-10a and Inhibit Atherosclerotic Lesion. <i>Methods in Molecular Biology</i> , 2019, 2019, 143-169.	0.9	3

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55	Shear stress attenuates tumor necrosis factor-alpha-induced monocyte chemotactic protein-1 expressions in endothelial cells. Chinese Journal of Physiology, 2002, 45, 169-76.	1.0	3
56	Vascular Endothelial Responses to Disturbed Flow: Pathologic Implications for Atherosclerosis. , 2008, , 469-496.		2
57	DESIGN AND CONSTRUCTION OF A HEMODYNAMIC SIMULATOR FOR STUDYING VASCULAR ENDOTHELIAL RESPONSES TO HEMODYNAMIC FORCES. Biomedical Engineering - Applications, Basis and Communications, 2008, 20, 95-105.	0.6	1
58	Punicalagin Attenuates Disturbed Flow-Induced Vascular Dysfunction by Inhibiting Force-Specific Activation of Smad1/5. Frontiers in Cell and Developmental Biology, 2021, 9, 697539.	3.7	1
59	Mechanical Regulation of Epigenetic Modifications in Vascular Biology and Pathobiology. Cardiac and Vascular Biology, 2021, , 241-276.	0.2	1
60	Novel Function of Cysteine-rich Secretory Protein from Naja Atra Venom:CRISP $\alpha$ induces pro-inflammatory responses of vascular endothelial cells. FASEB Journal, 2008, 22, 1219.1.	0.5	1
61	The Mechanism of Phenotypic Modulation of Vascular Smooth Muscle Cells: Role of extracellular matrix and PDGF $\beta$ /IL $\beta$ . FASEB Journal, 2008, 22, 965.4.	0.5	0
62	Shear Stress Induces Synthetic $\alpha$ contractile Phenotypic Change of Smooth Muscle Cells via Paracrine Effect of Prostacyclin from Endothelial Cells and the PPAR $\alpha$ / $\beta$ Pathways. FASEB Journal, 2008, 22, 1208.7.	0.5	0
63	MicroRNA $\alpha$ 146a Deficiency Promotes Atherosclerosis by Dysregulating Cholesterol Homeostasis in Macrophages. FASEB Journal, 2018, 32, 752.6.	0.5	0
64	Abstract 21097: Three-Dimensional Traction Stresses Facilitate Leukocyte Diapedesis. Circulation, 2017, 136, .	1.6	0