Jason L Johnson

List of Publications by Year
in descending order

114 papers	6,570 citations	53789 45 h-index	64791 79 g-index
115 all docs	115 docs citations	115 times ranked	8264 citing authors

#	Article	IF	Citations
1	TGF-Î² activity protects against inflammatory aortic aneurysm progression and complications in angiotensin IIâ€“infused mice. Journal of Clinical Investigation, 2010, 120, 422-432.	8.2	352
2	Hydrogen Sensing Using Pdâ€Functionalized Multiâ€Layer Graphene Nanoribbon Networks. Advanced Materials, 2010, 22, 4877-4880.	21.0	313
3	Divergent effects of matrix metalloproteinases 3, 7, 9, and 12 on atherosclerotic plaque stability in mouse brachiocephalic arteries. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 15575-15580.	7.1	308
4	Plaque Rupture After Short Periods of Fat Feeding in the Apolipoprotein Eâ€“Knockout Mouse. Circulation, 2005, 111, 1422-1430.	1.6	235
5	Activation of Matrix-Degrading Metalloproteinases by Mast Cell Proteases in Atherosclerotic Plaques. Arteriosclerosis, Thrombosis, and Vascular Biology, 1998, 18, 1707-1715.	2.4	234
6	Characteristics of Intact and Ruptured Atherosclerotic Plaques in Brachiocephalic Arteries of Apolipoprotein E Knockout Mice. Arteriosclerosis, Thrombosis, and Vascular Biology, 2002, 22, 788-792.	2.4	216
7	Atherosclerotic plaque rupture in the apolipoprotein E knockout mouse. Atherosclerosis, 2001, 154, 399-406.	0.8	213
8	Adenovirus-Mediated Gene Transfer of the Human TIMP-1 Gene Inhibits Smooth Muscle Cell Migration and Neointimal Formation in Human Saphenous Vein. Human Gene Therapy, 1998, 9, 867-877.	2.7	201
9	Genetic inactivation of IL-1 signaling enhances atherosclerotic plaque instability and reduces outward vessel remodeling in advanced atherosclerosis in mice. Journal of Clinical Investigation, 2012, 122, 70-79.	8.2	183
10	Macrophage heterogeneity in atherosclerotic plaques. Current Opinion in Lipidology, 2009, 20, 370-378.	2.7	151
11	Metalloproteinases in atherosclerosis. European Journal of Pharmacology, 2017, 816, 93-106.	3.5	151
12	Classical Macrophage Activation Up-Regulates Several Matrix Metalloproteinases through Mitogen Activated Protein Kinases and Nuclear Factor-ÎºB. PLoS ONE, 2012, 7, e42507.	2.5	148
13	Matrix metalloproteinases: influence on smooth muscle cells and atherosclerotic plaque stability. Expert Review of Cardiovascular Therapy, 2007, 5, 265-282.	1.5	144
14	A Selective Matrix Metalloproteinase-12 Inhibitor Retards Atherosclerotic Plaque Development in Apolipoprotein Eâ€“Knockout Mice. Arteriosclerosis, Thrombosis, and Vascular Biology, 2011, 31, 528-535.	2.4	144
15	Vulnerable atherosclerotic plaque metalloproteinases and foam cell phenotypes. Thrombosis and Haemostasis, 2009, 101, 1006-1011.	3.4	143
16	Suppression of Atherosclerotic Plaque Progression and Instability by Tissue Inhibitor of Metalloproteinase-2. Circulation, 2006, 113, 2435-2444.	1.6	142
17	Wnt4/Î²-Catenin Signaling Induces VSMC Proliferation and Is Associated With Intimal Thickening. Circulation Research, 2011, 108, 427-436.	4.5	140
18	Non-coding RNAs in cardiovascular cell biology and atherosclerosis. Cardiovascular Research, 2019, 115, 1732-1756.	3.8	138

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19	MicroRNA-181b Controls Atherosclerosis and Aneurysms Through Regulation of TIMP-3 and Elastin. Circulation Research, 2017, 120, 49-65.	4.5	125
20	Emerging regulators of vascular smooth muscle cell function in the development and progression of atherosclerosis. Cardiovascular Research, 2014, 103, 452-460.	3.8	123
21	Matrix Metalloproteinase (MMP)-3 Activates MMP-9 Mediated Vascular Smooth Muscle Cell Migration and Neointima Formation in Mice. Arteriosclerosis, Thrombosis, and Vascular Biology, 2011, 31, e35-44.	2.4	122
22	Assessment of Unstable Atherosclerosis in Mice. Arteriosclerosis, Thrombosis, and Vascular Biology, 2007, 27, 714-720.	2.4	111
23	MicroRNA-24 Regulates Macrophage Behavior and Retards Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, 1990-2000.	2.4	98
24	Room temperature hydrogen detection using Pd-coated GaN nanowires. Applied Physics Letters, 2008, 93, .	3.3	91
25	Injury Induces Dedifferentiation of Smooth Muscle Cells and Increased Matrix-Degrading Metalloproteinase Activity in Human Saphenous Vein. Arteriosclerosis, Thrombosis, and Vascular Biology, 2001, 21, 1146-1151.	2.4	90
26	MMP-7 mediates cleavage of N-cadherin and promotes smooth muscle cell apoptosis. Cardiovascular Research, 2010, 87, 137-146.	3.8	90
27	Hydrogen sensing with Pt-functionalized GaN nanowires. Sensors and Actuators B: Chemical, 2009, 140, 196-199.	7.8	82
28	Long-term reduction of medial and intimal thickening in porcine saphenous vein grafts with a polyglactin biodegradable external sheath. Journal of Vascular Surgery, 2004, 40, 1011-1019.	1.1	71
29	Effect of broad-spectrum matrix metalloproteinase inhibition on atherosclerotic plaque stability. Cardiovascular Research, 2006, 71, 586-595.	3.8	70
30	Nitride and oxide semiconductor nanostructured hydrogen gas sensors. Semiconductor Science and Technology, 2010, 25, 024002.	2.0	68
31	Low Tissue Inhibitor of Metalloproteinases 3 and High Matrix Metalloproteinase 14 Levels Defines a Subpopulation of Highly Invasive Foam-Cell Macrophages. Arteriosclerosis, Thrombosis, and Vascular Biology, 2008, 28, 1647-1653.	2.4	67
32	Sustained Reduction of Vein Graft Neointima Formation by Ex Vivo TIMP-3 Gene Therapy. Circulation, 2011, 124, S135-42.	1.6	65
33	Genomics of Foam Cells and Nonfoamy Macrophages From Rabbits Identifies Arginase-I as a Differential Regulator of Nitric Oxide Production. Arteriosclerosis, Thrombosis, and Vascular Biology, 2007, 27, 571-577.	2.4	62
34	A bioabsorbable (polyglactin), nonrestrictive, external sheath inhibits porcine saphenous vein graft thickening. Journal of Thoracic and Cardiovascular Surgery, 2004, 127, 1766-1772.	0.8	60
35	An external, oversized, porous polyester stent reduces vein graft neointima formation, cholesterol concentration, and vascular cell adhesion molecule 1 expression in cholesterol-fed pigs. Journal of Thoracic and Cardiovascular Surgery, 2002, 124, 950-956.	0.8	58
36	Relationship of MMP-14 and TIMP-3 Expression with Macrophage Activation and Human Atherosclerotic Plaque Vulnerability. Mediators of Inflammation, 2014, 2014, 1-17.	3.0	57

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37	Experimental characterization of single-walled carbon nanotube film-Si Schottky contacts using metal-semiconductor-metal structures. Applied Physics Letters, 2008, 92, 243116.	3.3	53
38	Vulnerable atherosclerotic plaque metalloproteinases and foam cell phenotypes. Thrombosis and Haemostasis, 2009, 101, 1006-11.	3.4	53
39	Macro-porosity is necessary for the reduction of neointimal and medial thickening by external stenting of porcine saphenous vein bypass grafts. Atherosclerosis, 2001, 155, 329-336.	0.8	52
40	Relationship between type IV collagen degradation, metalloproteinase activity and smooth muscle cell migration and proliferation in cultured human saphenous vein. Cardiovascular Research, 2003, 58, 679-688.	3.8	52
41	The endothelin 1a receptor antagonist BSF 302146 is a potent inhibitor of neointimal and medial thickening in porcine saphenous veinâ€"carotid artery interposition grafts. Journal of Thoracic and Cardiovascular Surgery, 2004, 127, 1317-1322.	0.8	52
42	Interruption of the OX40â€"OX40 Ligand Pathway in LDL Receptorâ€"Deficient Mice Causes Regression of Atherosclerosis. Journal of Immunology, 2013, 191, 4573-4580.	0.8	51
43	Carotid Atherosclerotic Plaque Matrix Metalloproteinaseâ€‐12â€"Positive Macrophage Subpopulation Predicts Adverse Outcome After Endarterectomy. Journal of the American Heart Association, 2012, 1, e001040.	3.7	49
44	Galectin-3 Identifies a Subset of Macrophages With a Potential Beneficial Role in Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2020, 40, 1491-1509.	2.4	49
45	Role of colony-stimulating factors in atherosclerosis. Current Opinion in Lipidology, 2012, 23, 412-421.	2.7	47
46	Wnt2 and WISP-1/CCN4 Induce Intimal Thickening via Promotion of Smooth Muscle Cell Migration. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, 1417-1424.	2.4	47
47	Soluble N-Cadherin Overexpression Reduces Features of Atherosclerotic Plaque Instability. Arteriosclerosis, Thrombosis, and Vascular Biology, 2009, 29, 195-201.	2.4	46
48	Experimental study of graphitic nanoribbon films for ammonia sensing. Journal of Applied Physics, 2011, 109, .	2.5	45
49	Differential effects of tissue inhibitor of metalloproteinase (TIMP)-1 and TIMP-2 on atherosclerosis and monocyte/macrophage invasion. Cardiovascular Research, 2016, 109, 318-330.	3.8	44
50	Growth and Characterization of GaN Nanowires for Hydrogen Sensors. Journal of Electronic Materials, 2009, 38, 490-494.	2.2	42
51	Elucidating the contributory role of microRNA to cardiovascular diseases (a review). Vascular Pharmacology, 2019, 114, 31-48.	2.1	42
52	Platelet-Associated Matrix Metalloproteinases Regulate Thrombus Formation and Exert Local Collagenolytic Activity. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, 2554-2561.	2.4	38
53	Near Infrared Fluorescence (NIRF) Molecular Imaging of Oxidized LDL with an Autoantibody in Experimental Atherosclerosis. Scientific Reports, 2016, 6, 21785.	3.3	38
54	Metal-semiconductor-metal photodetectors based on single-walled carbon nanotube filmâ€"GaAs Schottky contacts. Journal of Applied Physics, 2008, 103, 114315.	2.5	37

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55	Embolic protection device utilization during stenting of native coronary artery lesions with large lipid core plaques as detected by nearâ€infrared spectroscopy. Catheterization and Cardiovascular Interventions, 2012, 80, 1157-1162.	1.7	37
56	Animal models of spontaneous plaque rupture: The holy grail of experimental atherosclerosis research. Current Atherosclerosis Reports, 2002, 4, 238-242.	4.8	36
57	Wnt5a-Induced Wnt1-Inducible Secreted Protein-1 Suppresses Vascular Smooth Muscle Cell Apoptosis Induced by Oxidative Stress. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, 2449-2456.	2.4	36
58	Classical and Alternative Activation and Metalloproteinase Expression Occurs in Foam Cell Macrophages in Male and Female ApoE Null Mice in the Absence of T and B Lymphocytes. Frontiers in Immunology, 2014, 5, 537.	4.8	35
59	Plasmin-Mediated Fibroblast Growth Factor-2 Mobilisation Supports Smooth Muscle Cell Proliferation in Human Saphenous Vein. Journal of Vascular Research, 2001, 38, 492-501.	1.4	34
60	Short-term Exposure to Thapsigargin Inhibits Neointima Formation in Human Saphenous Vein. Arteriosclerosis, Thrombosis, and Vascular Biology, 1997, 17, 2500-2506.	2.4	31
61	Genetic Strategies to Elucidate the Roles of Matrix Metalloproteinases in Atherosclerotic Plaque Growth and Stability. Circulation Research, 2005, 97, 958-960.	4.5	31
62	A dose-finding and pharmacokinetic study of the matrix metalloproteinase inhibitor MMI270 (previously termed CGS27023A) with 5-FU and folinic acid. Cancer Chemotherapy and Pharmacology, 2005, 55, 39-46.	2.3	26
63	Hematopoietic Sphingosine 1-Phosphate Lyase Deficiency Decreases Atherosclerotic Lesion Development in LDL-Receptor Deficient Mice. PLoS ONE, 2013, 8, e63360.	2.5	26
64	Transforming Growth Factor-Î² Is Activated by Plasmin and Inhibits Smooth Muscle Cell Death in Human Saphenous Vein. Journal of Vascular Research, 2005, 42, 247-254.	1.4	25
65	NF-ÎºB inhibition prevents acute shear stress-induced inflammation in the saphenous vein graft endothelium. Scientific Reports, 2020, 10, 15133.	3.3	24
66	Aging differentially modulates the Wnt proâ€survival signalling pathways in vascular smooth muscle cells. Aging Cell, 2019, 18, e12844.	6.7	23
67	Disparate effects of MMP and TIMP modulation on coronary atherosclerosis and associated myocardial fibrosis. Scientific Reports, 2021, 11, 23081.	3.3	22
68	In Situ Zymography. Methods in Molecular Biology, 2010, 622, 271-277.	0.9	21
69	GaN nanowire and Ga2O3 nanowire and nanoribbon growth from ion implanted iron catalyst. Journal of Vacuum Science & Technology B, 2008, 26, 1841-1847.	1.3	20
70	The anti-atherogenic cytokine interleukin-33 inhibits the expression of a disintegrin and metalloproteinase with thrombospondin motifs-1, -4 and -5 in human macrophages: Requirement of extracellular signal-regulated kinase, c-Jun N-terminal kinase and phosphoinositide 3-kinase signaling pathways. International Journal of Biochemistry and Cell Biology, 2014, 46, 113-123.	2.8	20
71	Functional and cardioprotective effects of simultaneous and individual activation of protein kinase A and Epac. British Journal of Pharmacology, 2017, 174, 438-453.	5.4	20
72	Nitric oxideâ€"donating aspirin (NCX 4016) inhibits neointimal thickening in a pig model of saphenous vein-carotid artery interposition grafting: A comparison with aspirin and morpholinosydnonimine (SIN-1). Journal of Thoracic and Cardiovascular Surgery, 2007, 134, 1033-1039.	0.8	18

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73	cAMP-induced actin cytoskeleton remodelling inhibits MKL1-dependent expression of the chemotactic and pro-proliferative factor, CCN1. Journal of Molecular and Cellular Cardiology, 2015, 79, 157-168.	1.9	17
74	Field-emission properties of individual GaN nanowires grown by chemical vapor deposition. Journal of Applied Physics, 2012, 111, .	2.5	16
75	Magnetic Resonance Imaging Visualization of Vulnerable Atherosclerotic Plaques at the Brachiocephalic Artery of Apolipoprotein E Knockout Mice by the Blood-Pool Contrast Agent B22956/1. Molecular Imaging, 2014, 13, 7290.2014.00012.	1.4	16
76	Aneurysm Severity is Increased by Combined Mmp-7 Deletion and N-cadherin Mimetic (EC4-Fc) Over-Expression. Scientific Reports, 2017, 7, 17342.	3.3	13
77	Orally administered penicillamine is a potent inhibitor of neointimal and medial thickening in porcine saphenous veinâ€"carotid artery interposition grafts. Journal of Thoracic and Cardiovascular Surgery, 2007, 133, 494-500.	0.8	12
78	In vitro and in vivo analysis of expression cassettes designed for vascular gene transfer. Gene Therapy, 2008, 15, 340-346.	4.5	12
79	The association of platelet-derived growth factor receptor expression, plaque morphology and histological features with symptoms in carotid atherosclerosis. Vascular, 2000, 8, 121-129.	0.5	11
80	Localized Growth of Carbon Nanotubes on CMOS Substrate at Room Temperature Using Maskless Post-CMOS Processing. IEEE Nanotechnology Magazine, 2012, 11, 16-20.	2.0	11
81	Matrix metalloproteinases and their inhibitors in cardiovascular pathologies: current knowledge and clinical potential. Metalloproteinases in Medicine, 0, , 21.	1.0	9
82	Cathepsin K Deficiency Prevents the Aggravated Vascular Remodeling Response to Flow Cessation in ApoE-/- Mice. PLoS ONE, 2016, 11, e0162595.	2.5	9
83	Carotid artery ligation induced intimal thickening and proliferation is unaffected by ageing. Journal of Cell Communication and Signaling, 2018, 12, 529-537.	3.4	8
84	Increased expression of Wnt5A in unstable atherosclerotic plaques is associated with increased MMP expression and may contribute to instability. Atherosclerosis, 2010, 213, e12.	0.8	6
85	In Situ Zymography. , 2001, 151, 411-415.		5
86	EC4, a truncation of soluble N-cadherin, reduces vascular smooth muscle cell apoptosis and markers of atherosclerotic plaque instability. Molecular Therapy - Methods and Clinical Development, 2014, 1, 14004.	4.1	5
87	Aneurysm severity is suppressed by deletion of CCN4. Journal of Cell Communication and Signaling, 2021, 15, 421-432.	3.4	5
88	Effective decellularisation of human saphenous veins for biocompatible arterial tissue engineering applications: Bench optimisation and feasibility in vivo testing. Journal of Tissue Engineering, 2021, 12, 204173142098752.	5.5	5
89	Statin pleiotropism and atherosclerotic plaque rupture. Atherosclerosis, 2009, 206, 353-354.	0.8	4
90	Genetic inactivation of IL-1 signaling enhances atherosclerotic plaque instability and reduces outward vessel remodeling in advanced atherosclerosis in mice. Journal of Clinical Investigation, 2012, 122, 783-783.	8.2	3

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91	Monitoring Cellular Proliferation, Migration, and Apoptosis Associated with Atherosclerosis Plaques In Vitro. Methods in Molecular Biology, 2022, 2419, 133-167.	0.9	3
92	Role of Matrix Metalloproteinases in the Development and Progression of Atherosclerosis. , 2017, , 425-446.		2
93	Monoclonal Autoantibody Against a Cryptic Epitope on Tissue-Adherent Low-Density Lipoprotein for Molecular Imaging in Atherosclerosis. JACC: Cardiovascular Imaging, 2022, , .	5.3	2
94	Câ€…Development of Whole Body and Intravascular Near-infrared Optical Molecular Imaging of Markers of Plaque Vulnerablity in Atherosclerosis. Heart, 2014, 100, A128.1-A128.	2.9	1
95	Smoking alters hydroxyprostaglandin dehydrogenase expression in fetal membranes. Reproductive Toxicology, 2018, 82, 18-24.	2.9	1
96	BS26â€…Generation of a tissue engineered conduit from human saphenous vein and porcine blood outgrowth endothelial cells. , 2019, , .		1
97	A Protocol for a Novel Human Ex Vivo Model of Aneurysm. STAR Protocols, 2020, 1, 100108.	1.2	1
98	The predictive potential of circulating microRNA for future cardiovascular events. Cardiovascular Research, 2021, 117, 1-3.	3.8	1
99	Investigation of Atherosclerotic Plaque Vulnerability. Methods in Molecular Biology, 2022, 2419, 521-535.	0.9	1
100	Use of Mouse Carotid Model of Intimal to Probe Vascular Smooth Muscle Remodeling and Function in. Methods in Molecular Biology, 2022, 2419, 537-560.	0.9	1
101	Development and Preliminary Testing of Porcine Blood-Derived Endothelial-like Cells for Vascular Tissue Engineering Applications: Protocol Optimisation and Seeding of Decellularised Human Saphenous Veins. International Journal of Molecular Sciences, 2022, 23, 6633.	4.1	1
102	Micromachined Silicon Grids for Direct TEM Characterization of Carbon Nanotubes Grown by CVD. Materials Research Society Symposia Proceedings, 2006, 963, 1.	0.1	0
103	Metal-Semiconductor-Metal (MSM) Photodetectors Based on Single-walled Carbon Nanotube Film-GaAs Schottky Contacts. Materials Research Society Symposia Proceedings, 2007, 1057, 1.	0.1	0
104	EFFECTS OF TISSUE INHIBITOR OF METALLOPROTEINASE (TIMP) DEFICIENCY ON MACROPHAGE INFILTRATION, PLAQUE STABILITY AND PSEUDO-ANEURYSMS. Atherosclerosis, 2008, 199, 466.	0.8	0
105	Defect Noise Spectroscopy Results for GaN Nanowires. , 2009, , .		0
106	Ion Implanted SiO2 Substrates for Nucleating Silicon Oxide Nanowire Growth. Materials Research Society Symposia Proceedings, 2009, 1181, 90.	0.1	0
107	Matrix metalloproteinase-10: A product of classically-activated plaque macrophages with a putative role in collagenolysis. Vascular Pharmacology, 2012, 56, 319.	2.1	0
108	Metalloproteinases in atherosclerotic plaques â€" A matter of life or death. Vascular Pharmacology, 2012, 56, 336.	2.1	0

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109	P33â€ƒNRF2-MEDIATED UPREGULATION OF OSGIN1 AND OSGIN2 TRIGGERS CELL DETACHMENT THROUGH DYSREGULATED AUTOPHAGY â€" A POTENTIAL MECHANISM FOR ENDOTHELIAL EROSION OVERLYING STENOTIC PLAQUES. Cardiovascular Research, 2018, 114, S10-S10.	3.8	0
110	143â€...A pivotal role for NRF2 in endothelial detachmentâ€"implications for endothelial erosion of stenotic plaques. , 2019, , .		0
111	Animal Models of Vulnerable Plaque. , 2004, , 35-52.		0
112	Role of Matrix Metalloproteinases in Atherosclerosis. , 2014, , 247-262.		0
113	Monitoring Cellular and in Plaques and. Methods in Molecular Biology, 2022, 2419, 507-519.	0.9	0
114	Modulators of Monocyte and Macrophage Phenotypes in Atherosclerosis. , 0, , 365-386.		0