Elazer R Edelman

List of Publications by Year
in descending order

344	21,138	9264 74	11939 134
papers	citations	h-index	g-index

352	352	352	19816
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Antisense c-myb oligonucleotides inhibit intimal arterial smooth muscle cell accumulation in vivo. Nature, 1992, 359, 67-70.	27.8	773
3	Stent Thrombogenicity Early in High-Risk Interventional Settings Is Driven by Stent Design and Deployment and Protected by Polymer-Drug Coatings. Circulation, 2011, 123, 1400-1409.	1.6	688
4	Overexpression of the HDL receptor SR-BI alters plasma HDL and bile cholesterol levels. Nature, 1997, 387, 414-417.	27.8	660
5	Endovascular Stent Design Dictates Experimental Restenosis and Thrombosis. Circulation, 1995, 91, 2995-3001.	1.6	448
6	Local Perivascular Delivery of Basic Fibroblast Growth Factor in Patients Undergoing Coronary Bypass Surgery. Circulation, 1999, 100, 1865-1871.	1.6	398
7	Physiological Transport Forces Govern Drug Distribution for Stent-Based Delivery. Circulation, 2001, 104, 600-605.	1.6	382
8	Prediction of the Localization of High-Risk Coronary Atherosclerotic Plaques on the Basis of Low Endothelial Shear Stress. Circulation, 2008, 117, 993-1002.	1.6	346
9	Controlled and modulated release of basic fibroblast growth factor. Biomaterials, 1991, 12, 619-626.	11.4	344
10	Vascular Tissue Engineering: Progress, Challenges, and Clinical Promise. Cell Stem Cell, 2018, 22, 340-354.	11.1	320
11	Kruppel-like Factor 4 Regulates Endothelial Inflammation. Journal of Biological Chemistry, 2007, 282, 13769-13779.	3.4	316
12	In vivo and in vitro tracking of erosion in biodegradable materials using non-invasive fluorescence imaging. Nature Materials, 2011, 10, 890-890.	27.5	313
13	Drug-Eluting Stents in Preclinical Studies. Circulation, 2002, 106, 1867-1873.	1.6	271
14	Dabigatran and Rivaroxaban Use in Atrial Fibrillation Patients on Hemodialysis. Circulation, 2015, 131, 972-979.	1.6	271
15	Increased Thrombosis After Arterial Injury in Human C-Reactive Proteinâ€“Transgenic Mice. Circulation, 2003, 108, 512-515.	1.6	268
16	Neointimal thickening after stent delivery of paclitaxel: change in composition and arrest of growth over six months. Journal of the American College of Cardiology, 2000, 36, 2325-2332.	2.8	265
17	Arterial Paclitaxel Distribution and Deposition. Circulation Research, 2000, 86, 879-884.	4.5	237
18	Kinetics of basic fibroblast growth factor binding to its receptor and heparan sulfate proteoglycan: a mechanism for cooperativity. Biochemistry, 1992, 31, 8876-8883.	2.5	233

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19	Single-Cell Analysis of the Normal Mouse Aorta Reveals Functionally Distinct Endothelial Cell Populations. Circulation, 2019, 140, 147-163.	1.6	231
20	Pathobiologic Responses to Stenting 11Supported in part by grants from the National Institutes of Health (GM/HL49039 and HL03104), the Burroughs Wellcome Fund for Experimental Therapeutics, Durham, North Carolina, and the Whitaker Foundation, Rosslyn, Virginia.. American Journal of Cardiology, 1998, 81, 4E-6E.	1.6	222
21	Specific binding to intracellular proteins determines arterial transport properties for rapamycin and paclitaxel. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 9463-9467.	7.1	221
22	Regulation by Adrenocorticotropic Hormone of the in Vivo Expression of Scavenger Receptor Class B Type I (SR-BI), a High Density Lipoprotein Receptor, in Steroidogenic Cells of the Murine Adrenal Gland. Journal of Biological Chemistry, 1996, 271, 33545-33549.	3.4	215
23	Therapeutic Angiogenesis With Basic Fibroblast Growth Factor: Technique and Early Results. Annals of Thoracic Surgery, 1998, 65, 1540-1544.	1.3	213
24	Decreased neointimal formation in Mac-1â€“/â€“ mice reveals a role for inflammation in vascular repair after angioplasty. Journal of Clinical Investigation, 2000, 105, 293-300.	8.2	213
25	Stent and Artery Geometry Determine Intimal Thickening Independent of Arterial Injury. Circulation, 2000, 101, 812-818.	1.6	211
26	Balloon-Artery Interactions During Stent Placement. Circulation Research, 1999, 84, 378-383.	4.5	206
27	Efficacy of a Device to Narrow the Coronary Sinus in Refractory Angina. New England Journal of Medicine, 2015, 372, 519-527.	27.0	205
28	Dual Targeted Immunotherapy via In Vivo Delivery of Biohybrid RNAiâ€Peptide Nanoparticles to Tumorâ€Associated Macrophages and Cancer Cells. Advanced Functional Materials, 2015, 25, 4183-4194.	14.9	196
29	Strut Position, Blood Flow, and Drug Deposition. Circulation, 2005, 111, 2958-2965.	1.6	181
30	Expert recommendations on the assessment of wall shear stress in human coronary arteries: existing methodologies, technical considerations, and clinical applications. European Heart Journal, 2019, 40, 3421-3433.	2.2	178
31	Endogenous Cell Seeding. Circulation, 1996, 94, 2909-2914.	1.6	176
32	Natural History of Experimental Coronary Atherosclerosis and Vascular Remodeling in Relation to Endothelial Shear Stress. Circulation, 2010, 121, 2092-2101.	1.6	168
33	Monocyte Recruitment and Neointimal Hyperplasia in Rabbits. Arteriosclerosis, Thrombosis, and Vascular Biology, 1996, 16, 1312-1318.	2.4	162
34	Enhanced T-Helper-1 Lymphocyte Activation Patterns in Acute Coronary Syndromes. Journal of the American College of Cardiology, 2005, 45, 1939-1945.	2.8	157
35	Tissue Engineering Therapy for Cardiovascular Disease. Circulation Research, 2003, 92, 1068-1078.	4.5	152
36	Intravascular Ultrasound Guidance to Minimize the Use of Iodine Contrast in Percutaneous Coronary Intervention. JACC: Cardiovascular Interventions, 2014, 7, 1287-1293.	2.9	152

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37	Stromal Endothelial Cells Directly Influence Cancer Progression. Science Translational Medicine, 2011, 3, 66ra5.	12.4	145
38	Augmented Expression and Activity of Extracellular Matrix-Degrading Enzymes in Regions of Low Endothelial Shear Stress Colocalize With Coronary Atheromata With Thin Fibrous Caps in Pigs. Circulation, 2011, 123, 621-630.	1.6	142
39	Coronary Artery Disease and Diabetes Mellitus. Cardiology Clinics, 2014, 32, 439-455.	2.2	135
40	miRNAs in atherosclerotic plaque initiation, progression, and rupture. Trends in Molecular Medicine, 2015, 21, 307-318.	6.7	134
41	Cardiology Is Flow. Circulation, 2006, 113, 2679-2682.	1.6	129
42	Neutrophil, Not Macrophage, Infiltration Precedes Neointimal Thickening in Balloon-Injured Arteries. Arteriosclerosis, Thrombosis, and Vascular Biology, 2000, 20, 2553-2558.	2.4	126
43	Mortality and Paclitaxel-Coated Devices. Circulation, 2020, 141, 1859-1869.	1.6	122
44	Thrombosis Modulates Arterial Drug Distribution for Drug-Eluting Stents. Circulation, 2005, 111, 1619-1626.	1.6	120
45	Antisense Oligonucleotide Inhibition of PDGFR-Î² Receptor Subunit Expression Directs Suppression of Intimal Thickening. Circulation, 1997, 95, 669-676.	1.6	116
46	Uremic Serum and Solutes Increase Postâ€“Vascular Interventional Thrombotic Risk Through Altered Stability of Smooth Muscle Cell Tissue Factor. Circulation, 2013, 127, 365-376.	1.6	113
47	Gold-Coated NIR Stents in Porcine Coronary Arteries. Circulation, 2001, 103, 429-434.	1.6	112
48	Innervation Patterns May Limit Response to Endovascular Renal Denervation. Journal of the American College of Cardiology, 2014, 64, 1079-1087.	2.8	110
49	Systemic Inflammation Induced by Lipopolysaccharide Increases Neointimal Formation After Balloon and Stent Injury in Rabbits. Circulation, 2002, 105, 2917-2922.	1.6	108
50	Arterial Ultrastructure Influences Transport of Locally Delivered Drugs. Circulation Research, 2002, 90, 826-832.	4.5	106
51	The role of low endothelial shear stress in the conversion of atherosclerotic lesions from stable to unstable plaque. Current Opinion in Cardiology, 2009, 24, 580-590.	1.8	106
52	Aldehydeâ€Amine Chemistry Enables Modulated Biosealants with Tissueâ€Specific Adhesion. Advanced Materials, 2009, 21, 3399-3403.	21.0	104
53	Stent elution rate determines drug deposition and receptor-mediated effects. Journal of Controlled Release, 2012, 161, 918-926.	9.9	103
54	Transdermal Delivery of Heparin by Skin Electroporation. Nature Biotechnology, 1995, 13, 1205-1209.	17.5	102

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55	Intravascular drug release kinetics dictate arterial drug deposition, retention, and distribution. Journal of Controlled Release, 2007, 123, 100-108.	9.9	102
56	Luminal flow patterns dictate arterial drug deposition in stent-based delivery. Journal of Controlled Release, 2009, 133, 24-30.	9.9	102
57	Carrier proteins determine local pharmacokinetics and arterial distribution of paclitaxel. Journal of Pharmaceutical Sciences, 2001, 90, 1324-1335.	3.3	100
58	Liposomal Alendronate Inhibits Systemic Innate Immunity and Reduces In-Stent Neointimal Hyperplasia in Rabbits. Circulation, 2003, 108, 2798-2804.	1.6	100
59	Vascular Tissue Engineering. Circulation Research, 1999, 85, 1115-1117.	4.5	95
60	Cellular Response to Transforming Growth Factor-Î²1 and Basic Fibroblast Growth Factor Depends on Release Kinetics and Extracellular Matrix Interactions. Journal of Biological Chemistry, 1996, 271, 29822-29829.	3.4	94
61	Dysfunctional endothelial cells directly stimulate cancer inflammation and metastasis. International Journal of Cancer, 2013, 133, 1334-1344.	5.1	94
62	c- myc in Vasculoproliferative Disease. Circulation Research, 1995, 76, 176-182.	4.5	90
63	Effects of amide and amine plasma-treated ePTFE vascular grafts on endothelial cell lining in an artificial circulatory system. , 1998, 42, 188-198.		89
64	Syndecan-4 proteoliposomes enhance fibroblast growth factor-2 (FGF-2)â€“induced proliferation, migration, and neovascularization of ischemic muscle. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1679-1684.	7.1	89
65	The Aryl Hydrocarbon Receptor is a Critical Regulator of Tissue Factor Stability and an Antithrombotic Target in Uremia. Journal of the American Society of Nephrology: JASN, 2016, 27, 189-201.	6.1	88
66	The total quasi-steady-state approximation is valid for reversible enzyme kinetics. Journal of Theoretical Biology, 2004, 226, 303-313.	1.7	87
67	Calcified plaque modification alters local drug delivery in the treatment of peripheral atherosclerosis. Journal of Controlled Release, 2017, 264, 203-210.	9.9	87
68	Hoop Dreams. Circulation, 1996, 94, 1199-1202.	1.6	87
69	Pulsatility and high shear stress deteriorate barrier phenotype in brain microvascular endothelium. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 2614-2625.	4.3	85
70	Biomechanical Modeling to Improve Coronary Artery Bifurcation Stenting. JACC: Cardiovascular Interventions, 2015, 8, 1281-1296.	2.9	84
71	Thin-Capped Atheromata With Reduced Collagen Content in Pigs Develop in Coronary Arterial Regions Exposed to Persistently Low Endothelial Shear Stress. Arteriosclerosis, Thrombosis, and Vascular Biology, 2013, 33, 1494-1504.	2.4	81
72	In vivo and in vitro evaluation of a biodegradable magnesium vascular stent designed by shape optimization strategy. Biomaterials, 2019, 221, 119414.	11.4	81

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73	Endothelial Implants Inhibit Intimal Hyperplasia After Porcine Angioplasty. Circulation Research, 1999, 84, 384-391.	4.5	80
74	Equilibrium and non-equilibrium phase transitions in copolymer polyelectrolyte hydrogels. Journal of Chemical Physics, 1997, 107, 1645-1654.	3.0	78
75	Perivascular graft heparin delivery using biodegradable polymer wraps. Biomaterials, 2000, 21, 2279-2286.	11.4	76
76	Preclinical Evaluation of Drug-Eluting Stents for Peripheral Applications. Circulation, 2004, 110, 2498-2505.	1.6	74
77	Optimizing Glutaraldehyde-Fixed Tissue Heart Valves with Chondroitin Sulfate Hydrogel for Endothelialization and Shielding against Deterioration. Biomacromolecules, 2018, 19, 1234-1244.	5.4	74
78	Endothelial Cells Provide Feedback Control for Vascular Remodeling Through a Mechanosensitive Autocrine TGF-Î² Signaling Pathway. Circulation Research, 2008, 103, 289-297.	4.5	73
79	Lesion complexity determines arterial drug distribution after local drug delivery. Journal of Controlled Release, 2010, 142, 332-338.	9.9	71
80	Impact of transport and drug properties on the local pharmacology of drug-eluting stents. International Journal of Cardiovascular Interventions, 2003, 5, 7-12.	0.5	69
81	Hydrogel Nanocomposites with Independently Tunable Rheology and Mechanics. ACS Nano, 2017, 11, 2598-2610.	14.6	69
82	Leukocyte recruitment and expression of chemokines following different forms of vascular injury. Vascular Medicine, 2003, 8, 1-7.	1.5	68
83	Revascularization for coronary artery disease in diabetes mellitus: Angioplasty, stents and coronary artery bypass grafting. Reviews in Endocrine and Metabolic Disorders, 2010, 11, 75-86.	5.7	68
84	Catheter-Based Renal Denervation Is NoÂSimple Matter. Journal of the American College of Cardiology, 2014, 64, 644-646.	2.8	68
85	Endothelial cell delivery for cardiovascular therapy. Advanced Drug Delivery Reviews, 2000, 42, 139-161.	13.7	67
86	Mechanisms of Transmural Heparin Transport in the Rat Abdominal Aorta After Local Vascular Delivery. Circulation Research, 1995, 77, 1143-1150.	4.5	67
87	Monocyte-endothelial cell interactions in the regulation of vascular sprouting and liver regeneration in mouse. Journal of Hepatology, 2015, 63, 917-925.	3.7	66
88	Characterization of Star Adhesive Sealants Based On PEG/Dextran Hydrogels. Macromolecular Bioscience, 2009, 9, 754-765.	4.1	65
89	Mechanisms of Tissue Uptake and Retention in Zotarolimus-Coated Balloon Therapy. Circulation, 2013, 127, 2047-2055.	1.6	65
90	Physical nanoscale conduit-mediated communication between tumour cells and the endothelium modulates endothelial phenotype. Nature Communications, 2015, 6, 8671.	12.8	65

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91	Glucose Modulates Basement Membrane Fibroblast Growth Factor-2 via Alterations in Endothelial Cell Permeability. Journal of Biological Chemistry, 2007, 282, 14635-14644.	3.4	64
92	Enhanced drug delivery capabilities from stents coated with absorbable polymer and crystalline drug. Journal of Controlled Release, 2012, 162, 561-567.	9.9	64
93	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
94	Target-responsive DNA/RNA nanomaterials for microRNA sensing and inhibition: The jack-of-all-trades in cancer nanotheranostics?. Advanced Drug Delivery Reviews, 2015, 81, 169-183.	13.7	63
95	Effect of pre-adsorbed proteins on attachment, proliferation, and function of endothelial cells. Journal of Cellular Physiology, 2002, 191, 155-161.	4.1	61
96	Embolic Protection With Filtering or Occlusion Balloons During Saphenous Vein Graft Stenting Retrieves Identical Volumes and Sizes of Particulate Debris. Circulation, 2004, 109, 1735-1740.	1.6	61
97	Viscoelastic adhesive mechanics of aldehyde-mediated soft tissue sealants. Biomaterials, 2008, 29, 4584-4591.	11.4	61
98	Regulation of dendrimer/dextran material performance by altered tissue microenvironment in inflammation and neoplasia. Science Translational Medicine, 2015, 7, 272ra11.	12.4	61
99	Perivascular Endothelial Implants Inhibit Intimal Hyperplasia in a Model of Arteriovenous Fistulae: A Safety and Efficacy Study in the Pig. Journal of Vascular Research, 2002, 39, 524-533.	1.4	60
100	Vascular Neointimal Formation and Signaling Pathway Activation in Response to Stent Injury in Insulin-Resistant and Diabetic Animals. Circulation Research, 2005, 97, 725-733.	4.5	58
101	Heparanase Regulates Thrombosis in Vascular Injury and Stent-Induced Flow Disturbance. Journal of the American College of Cardiology, 2012, 59, 1551-1560.	2.8	58
102	Tissue-engineered endothelial and epithelial implants differentially and synergistically regulate airway repair. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7046-7051.	7.1	57
103	Methodological Standardization for theÂPre-Clinical Evaluation of RenalÂSympatheticÂDenervation. JACC: Cardiovascular Interventions, 2014, 7, 1184-1193.	2.9	57
104	Arterial microanatomy determines the success of energy-based renal denervation in controlling hypertension. Science Translational Medicine, 2015, 7, 285ra65.	12.4	57
105	Luminal Flow Amplifies Stent-Based Drug Deposition in Arterial Bifurcations. PLoS ONE, 2009, 4, e8105.	2.5	54
106	Heparanase Alters Arterial Structure, Mechanics, and Repair Following Endovascular Stenting in Mice. Circulation Research, 2009, 104, 380-387.	4.5	54
107	Smooth Muscle Cells Orchestrate the Endothelial Cell Response to Flow and Injury. Circulation, 2010, 121, 2192-2199.	1.6	53
108	Regulation of heparanase expression in coronary artery disease in diabetic, hyperlipidemic swine. Atherosclerosis, 2010, 213, 436-442.	0.8	53

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109	Stents: Biomechanics, Biomaterials, and Insights from Computational Modeling. Annals of Biomedical Engineering, 2017, 45, 853-872.	2.5	53
110	The effect of substrate modulus on the growth and function of matrix-embedded endothelial cells. Biomaterials, 2013, 34, 677-684.	11.4	52
111	Dynamic flow alterations dictate leukocyte adhesion and response to endovascular interventions. Journal of Clinical Investigation, 2004, 113, 1607-1614.	8.2	52
112	Cells in fluidic environments are sensitive to flow frequency. Journal of Cellular Physiology, 2005, 204, 329-335.	4.1	50
113	Thrombus causes fluctuations in arterial drug delivery from intravascular stents. Journal of Controlled Release, 2008, 131, 173-180.	9.9	50
114	Extent of flow recirculation governs expression of atherosclerotic and thrombotic biomarkers in arterial bifurcations. Cardiovascular Research, 2014, 103, 37-46.	3.8	50
115	Adventitial endothelial implants reduce matrix metalloproteinase-2 expression and increase luminal diameter in porcine arteriovenous grafts. Journal of Vascular Surgery, 2007, 46, 548-556.e2.	1.1	48
116	Endothelial Implants Provide Long-Term Control of Vascular Repair in a Porcine Model of Arterial Injury. Journal of Surgical Research, 2001, 99, 228-234.	1.6	47
117	Cellular bridges. Communicative and Integrative Biology, 2010, 3, 215-220.	1.4	46
118	Strain-induced accelerated asymmetric spatial degradation of polymeric vascular scaffolds. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2640-2645.	7.1	46
119	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
120	Intravascular fibrin molecular imaging improves the detection of unhealed stents assessed by optical coherence tomographyin vivo. European Heart Journal, 2015, 38, ehv677.	2.2	45
121	Impact of flow pulsatility on arterial drug distribution in stent-based therapy. Journal of Controlled Release, 2013, 168, 115-124.	9.9	44
122	Stent-Versus-Stent Equivalency Trials. Circulation, 1999, 100, 896-898.	1.6	43
123	Randomized Comparison of Ridaforolimus- and Zotarolimus-Eluting Coronary Stents in Patients With Coronary Artery Disease. Circulation, 2017, 136, 1304-1314.	1.6	43
124	Polyelectrolyte hydrogel instabilities in ionic solutions. Journal of Chemical Physics, 1996, 105, 10606-10613.	3.0	42
125	Fabrication of Bioactive Surfaces by Plasma Polymerization Techniques Using a Novel Acrylate-Derived Monomer. Plasma Processes and Polymers, 2005, 2, 605-611.	3.0	41
126	Treatment with chondroitin sulfate to modulate inflammation and atherogenesis in obesity. Atherosclerosis, 2016, 245, 82-87.	0.8	41

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127	Grapheneâ€“Dendrimer Nanostars for Targeted Macrophage Overexpression of Metalloproteinase 9 and Hepatic Fibrosis Precision Therapy. Nano Letters, 2018, 18, 5839-5845.	9.1	40
128	Transapical Mitral Implantation of the Tiara Bioprosthesis. JACC: Cardiovascular Interventions, 2014, 7, 154-162.	2.9	39
129	C-reactive protein promotes monocyte?platelet aggregation: an additional link to the inflammatory-thrombotic intricacy. European Journal of Haematology, 2007, 78, 246-252.	2.2	38
130	Targeting STUB1â€“tissue factor axis normalizes hyperthrombotic uremic phenotype without increasing bleeding risk. Science Translational Medicine, 2017, 9, .	12.4	38
131	Regulation of Endothelial Cell Proliferation by Primary Monocytes. Arteriosclerosis, Thrombosis, and Vascular Biology, 2008, 28, 97-104.	2.4	37
132	The c-Cbl Ubiquitin Ligase Regulates Nuclear Î²-Catenin and Angiogenesis by Its Tyrosine Phosphorylation Mediated through the Wnt Signaling Pathway. Journal of Biological Chemistry, 2015, 290, 12537-12546.	3.4	37
133	Tuning adhesion failure strength for tissue-specific applications. Acta Biomaterialia, 2011, 7, 67-74.	8.3	35
134	The role of scaffold microarchitecture in engineering endothelial cell immunomodulation. Biomaterials, 2012, 33, 7019-7027.	11.4	35
135	A tunable delivery platform to provide local chemotherapy for pancreatic ductal adenocarcinoma. Biomaterials, 2016, 93, 71-82.	11.4	35
136	A geometrically adaptable heart valve replacement. Science Translational Medicine, 2020, 12, .	12.4	35
137	Tenofovir prodrugs potently inhibit Epsteinâ€“Barr virus lytic DNA replication by targeting the viral DNA polymerase. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12368-12374.	7.1	34
138	Structural Mechanics Predictions Relating to Clinical Coronary Stent Fracture in a 5ÂYear Period in FDA MAUDE Database. Annals of Biomedical Engineering, 2016, 44, 391-403.	2.5	33
139	Matrix Embedding Alters the Immune Response Against Endothelial Cells In Vitro and In Vivo. Circulation, 2005, 112, I89-95.	1.6	33
140	Natural Tissue Microenvironmental Conditions Modulate Adhesive Material Performance. Langmuir, 2012, 28, 15402-15409.	3.5	32
141	How Do We Prevent the Vulnerable Atherosclerotic Plaque From Rupturing? Insights From In Vivo Assessments of Plaque, Vascular Remodeling, and Local Endothelial Shear Stress. Journal of Cardiovascular Pharmacology and Therapeutics, 2015, 20, 261-275.	2.0	32
142	Drug Clearance and Arterial Uptake After Local Perivascular Delivery to the Rat Carotid Artery. Journal of the American College of Cardiology, 1997, 29, 1645-1650.	2.8	31
143	Elimination of Transcoarctation Pressure Gradients Has No Impact on Left Ventricular Function or Aortic Shear Stress After Intervention in Patients With Mild Coarctation. JACC: Cardiovascular Interventions, 2016, 9, 1953-1965.	2.9	31
144	Chondroitin Sulphate Attenuates Atherosclerosis in ApoE Knockout Mice Involving Cellular Regulation of the Inflammatory Response. Thrombosis and Haemostasis, 2018, 118, 1329-1339.	3.4	31

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145	Angiogenic potential of perivascularly delivered aFGF in a porcine model of chronic myocardial ischemia. American Journal of Physiology - Heart and Circulatory Physiology, 1998, 274, H930-H936.	3.2	30
146	Transgenic expression of human C-reactive protein suppresses endothelial nitric oxide synthase expression and bioactivity after vascular injury. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H489-H495.	3.2	30
147	Attenuation of inflammation and expansive remodeling by Valsartan alone or in combination with Simvastatin in high-risk coronary atherosclerotic plaques. Atherosclerosis, 2009, 203, 387-394.	0.8	30
148	Augmentation of postswelling surgical sealant potential of adhesive hydrogels. Journal of Biomedical Materials Research - Part A, 2010, 95A, 1159-1169.	4.0	30
149	Primary Monocytes Regulate Endothelial Cell Survival Through Secretion of Angiopoietin-1 and Activation of Endothelial Tie2. Arteriosclerosis, Thrombosis, and Vascular Biology, 2011, 31, 870-875.	2.4	30
150	Taking paclitaxel coated balloons to a higher level: Predicting coating dissolution kinetics, tissue retention and dosing dynamics. Journal of Controlled Release, 2019, 310, 94-102.	9.9	30
151	Phosphorylation-induced Conformational Changes in a Mitogen-activated Protein Kinase Substrate. Journal of Biological Chemistry, 2002, 277, 47653-47661.	3.4	29
152	Proangiogenic stimulation of bone marrow endothelium engages mTOR and is inhibited by simultaneous blockade of mTOR and NF-Î¹B. Blood, 2006, 107, 285-292.	1.4	29
153	Synergistic effect of local endothelial shear stress and systemic hypercholesterolemia on coronary atherosclerotic plaque progression and composition in pigs. International Journal of Cardiology, 2013, 169, 394-401.	1.7	29
154	False lumen pressure estimation in type B aortic dissection using 4D flow cardiovascular magnetic resonance: comparisons with aortic growth. Journal of Cardiovascular Magnetic Resonance, 2021, 23, 51.	3.3	29
155	Assessment of the Angiogenic Potential of 2-Deoxy-D-Ribose Using a Novel in vitro 3D Dynamic Model in Comparison With Established in vitro Assays. Frontiers in Bioengineering and Biotechnology, 2019, 7, 451.	4.1	28
156	Oral Heparin Prevents Neointimal Hyperplasia After Arterial Injury. Circulation, 2001, 104, 3121-3124.	1.6	27
157	Drug deposition in coronary arteries with overlapping drug-eluting stents. Journal of Controlled Release, 2016, 238, 1-9.	9.9	27
158	Local and systemic drug competition in drug-eluting stent tissue deposition properties. Journal of Controlled Release, 2005, 109, 236-243.	9.9	26
159	The role of aortic compliance in determination of coarctation severity: Lumped parameter modeling, in vitro study and clinical evaluation. Journal of Biomechanics, 2015, 48, 4229-4237.	2.1	26
160	Effect of working environment and procedural strategies on mechanical performance of bioresorbable vascular scaffolds. Acta Biomaterialia, 2018, 82, 34-43.	8.3	26
161	Ventricular stroke work and vascular impedance refine the characterization of patients with aortic stenosis. Science Translational Medicine, 2019, 11, .	12.4	26
162	Mixed Valvular Disease Following Transcatheter Aortic Valve Replacement: Quantification and Systematic Differentiation Using Clinical Measurements and Imageâ€Based Patientâ€Specific In Silico Modeling. Journal of the American Heart Association, 2020, 9, e015063.	3.7	26

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163	Arterial heparin deposition: role of diffusion, convection, and extravascular space. American Journal of Physiology - Heart and Circulatory Physiology, 1998, 275, H2236-H2242.	3.2	25
164	A Structural Model that Explains the Effects of Hyperglycemia on Collagenolysis. Biophysical Journal, 2003, 85, 2198-2204.	0.5	25
165	The Evolution of Endothelial Regulatory Paradigms in Cancer Biology and Vascular Repair. Cancer Research, 2011, 71, 7339-7344.	0.9	25
166	Targeted anti-inflammatory systemic therapy for restenosis: The Biorest Liposomal Alendronate with Stenting sTudy (BLAST)â€"a double blind, randomized clinical trial. American Heart Journal, 2013, 165, 234-240.e1.	2.7	25
167	Twenty-Fourâ€"Hour Ex Vivo Perfusion with Acellular Solution Enables Successful Replantation of Porcine Forelimbs. Plastic and Reconstructive Surgery, 2019, 144, 608e-618e.	1.4	25
168	Measurement of drug distribution in vascular tissue using quantitative fluorescence microscopy. Journal of Pharmaceutical Sciences, 1999, 88, 822-829.	3.3	24
169	Endothelial heparan sulfate is necessary but not sufficient for control of vascular smooth muscle cell growth. , 2000, 184, 93-100.		24
170	Local drug delivery: an emerging approach in the treatment of restenosis. Vascular Medicine, 2000, 5, 97-102.	1.5	24
171	On the validity of the quasi-steady state approximation of bimolecular reactions in solution. Journal of Theoretical Biology, 2005, 233, 343-350.	1.7	24
172	The Impact of Blood Rheology on Drug Transport in Stented Arteries: Steady Simulations. PLoS ONE, 2015, 10, e0128178.	2.5	24
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