John Eberth

List of Publications by Year in descending order

54 papers	1,188 citations	471061 17 h-index	395343 33 g-index
57 all docs	57 docs citations	57 times ranked	1073 citing authors

#	Article	IF	Citations
1	Reduced Smooth Muscle Contractile Capacity Facilitates Maladaptive Arterial Remodeling. Journal of Biomechanical Engineering, 2022, 144, .	0.6	3
2	Evaluation of the Stressâ€“Growth Hypothesis in Saphenous Vein Perfusion Culture. Annals of Biomedical Engineering, 2021, 49, 487-501.	1.3	6
3	The Association Between Curvature and Rupture in a Murine Model of Abdominal Aortic Aneurysm and Dissection. Experimental Mechanics, 2021, 61, 203-216.	1.1	4
4	Myocardial TGFÎ²2 Is Required for Atrioventricular Cushion Remodeling and Myocardial Development. Journal of Cardiovascular Development and Disease, 2021, 8, 26.	0.8	2
5	Longitudinal histomechanical heterogeneity of the internal thoracic artery. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 116, 104314.	1.5	4
6	Systemic delivery of targeted nanotherapeutic reverses angiotensin II-induced abdominal aortic aneurysms in mice. Scientific Reports, 2021, 11, 8584.	1.6	13
7	Mechanics of ascending aortas from TGFÎ²-1, -2, -3 haploinsufficient mice and elastase-induced aortopathy. Journal of Biomechanics, 2021, 125, 110543.	0.9	2
8	Diet alters age-related remodeling of aortic collagen in mice susceptible to atherosclerosis. American Journal of Physiology - Heart and Circulatory Physiology, 2021, 320, H52-H65.	1.5	5
9	Smallâ€diameter artery decellularization: Effects of anionic detergent concentration and treatment duration on porcine internal thoracic arteries. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, , .	1.6	4
10	Brief communication: Maximum ingested bite size in captive western lowland gorillas (Gorilla gorilla) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.1	1
11	Transforming Growth Factor Beta3 is Required for Cardiovascular Development. Journal of Cardiovascular Development and Disease, 2020, 7, 19.	0.8	21
12	Null strain analysis of submerged aneurysm analogues using a novel 3D stereomicroscopy device. Computer Methods in Biomechanics and Biomedical Engineering, 2020, 23, 332-344.	0.9	7
13	Targeted Gold Nanoparticles as an Indicator of Mechanical Damage in an Elastase Model of Aortic Aneurysm. Annals of Biomedical Engineering, 2020, 48, 2268-2278.	1.3	11
14	Gold nanoparticles that target degraded elastin improve imaging and rupture prediction in an AngII mediated mouse model of abdominal aortic aneurysm. Theranostics, 2019, 9, 4156-4167.	4.6	20
15	Geometric determinants of local hemodynamics in severe carotid artery stenosis. Computers in Biology and Medicine, 2019, 114, 103436.	3.9	23
16	Constitutive modeling of compressible type-I collagen hydrogels. Medical Engineering and Physics, 2018, 53, 39-48.	0.8	18
17	Contractile Smooth Muscle and Active Stress Generation in Porcine Common Carotids. Journal of Biomechanical Engineering, 2018, 140, .	0.6	13
18	Removing vessel constriction on the embryonic heart results in changes in valve gene expression, morphology, and hemodynamics. Developmental Dynamics, 2018, 247, 531-541.	0.8	10

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19	Pulsatile Perfusion Bioreactor for Biomimetic Vascular Impedances. Journal of Medical Devices, Transactions of the ASME, 2018, 12, .	0.4	6
20	Perfusion Tissue Culture Initiates Differential Remodeling of Internal Thoracic Arteries, Radial Arteries, and Saphenous Veins. Journal of Vascular Research, 2018, 55, 255-267.	0.6	5
21	Comparative mechanics of diverse mammalian carotid arteries. PLoS ONE, 2018, 13, e0202123.	1.1	23
22	Mechanical and geometrical determinants of wall stress in abdominal aortic aneurysms: A computational study. PLoS ONE, 2018, 13, e0192032.	1.1	25
23	Design and Fabrication of a Three-Dimensional In Vitro System for Modeling Vascular Stenosis. Microscopy and Microanalysis, 2017, 23, 859-871.	0.2	5
24	Molecular Consequences of Cardiac Valve Development as a Result of Altered Hemodynamics. Microscopy and Microanalysis, 2017, 23, 1330-1331.	0.2	0
25	Therapeutic Engineered Hydrogels Postpone Capsule Formation at the Host-Implant Interface. Microscopy and Microanalysis, 2017, 23, 1306-1307.	0.2	0
26	The Use of a Degradable Biomaterial to Regulate Fibrosis at the Implant-Host Interface. Microscopy and Microanalysis, 2016, 22, 1052-1053.	0.2	1
27	Pathological Consequences of Altered Hemodynamics During Heart Valve Development. Microscopy and Microanalysis, 2016, 22, 1062-1063.	0.2	0
28	Design and Fabrication of a Three-Dimensional In Vitro Model of Vascular Stenosis. Microscopy and Microanalysis, 2016, 22, 1766-1767.	0.2	1
29	Comparison of Aortic Collagen Fiber Angle Distribution in Mouse Models of Atherosclerosis Using Second-Harmonic Generation (SHG) Microscopy. Microscopy and Microanalysis, 2016, 22, 55-62.	0.2	16
30	The perivascular environment along the vertebral artery governs segment-specific structural and mechanical properties. Acta Biomaterialia, 2016, 45, 286-295.	4.1	11
31	A Novel Ex Ovo Banding Technique to Alter Intracardiac Hemodynamics in an Embryonic Chicken System. Journal of Visualized Experiments, 2016, , .	0.2	2
32	A mechanical argument for the differential performance of coronary artery grafts. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 54, 93-105.	1.5	37
33	Altered Hemodynamics in the Embryonic Heart Affects Outflow Valve Development. Journal of Cardiovascular Development and Disease, 2015, 2, 108-124.	0.8	48
34	Biofabrication of Dynamic, 3-Dimensional, In vitro Models of Disease. Microscopy and Microanalysis, 2015, 21, 619-620.	0.2	2
35	Dietâ€induced Vascular Remodeling Produces a Shift in Collagen Fiber Angle Distribution in a Mouse Model of Atherosclerosis. FASEB Journal, 2015, 29, 719.9.	0.2	0
36	The impact of flow-induced forces on the morphogenesis of the outflow tract. Frontiers in Physiology, 2014, 5, 225.	1.3	33

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37	Chitosan and chitosan composites reinforced with carbon nanostructures. Journal of Alloys and Compounds, 2014, 615, S515-S521.	2.8	7
38	Consistent Biomechanical Phenotyping of Common Carotid Arteries from Seven Genetic, Pharmacological, and Surgical Mouse Models. Annals of Biomedical Engineering, 2014, 42, 1207-1223.	1.3	43
39	Sintering of Chitosan and Chitosan Composites. , 2012, , .		3
40	Acute mechanical effects of elastase on the infrarenal mouse aorta: Implications for models of aneurysms. Journal of Biomechanics, 2012, 45, 660-665.	0.9	38
41	Evaluation of heat propagation through poultry in a reduced computationalâ€cost model of contact cooking. International Journal of Food Science and Technology, 2012, 47, 1130-1137.	1.3	5
42	Constitutive function, residual stress, and state of uniform stress in arteries. Journal of the Mechanics and Physics of Solids, 2012, 60, 1145-1157.	2.3	8
43	Evolving biaxial mechanical properties of mouse carotid arteries in hypertension. Journal of Biomechanics, 2011, 44, 2532-2537.	0.9	28
44	On optimal defibrillating pulse synthesis. , 2011, , .		2
45	Advanced Engine Cooling â€“ Components, Testing and Observations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 294-299.	0.4	9
46	Time course of carotid artery growth and remodeling in response to altered pulsatility. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 299, H1875-H1883.	1.5	44
47	Modelling carotid artery adaptations to dynamic alterations in pressure and flow over the cardiac cycle. Mathematical Medicine and Biology, 2010, 27, 343-371.	0.8	23
48	Origin of axial prestretch and residual stress in arteries. Biomechanics and Modeling in Mechanobiology, 2009, 8, 431-446.	1.4	162
49	Mechanics of Carotid Arteries in a Mouse Model of Marfan Syndrome. Annals of Biomedical Engineering, 2009, 37, 1093-1104.	1.3	76
50	Fundamental role of axial stress in compensatory adaptations by arteries. Journal of Biomechanics, 2009, 42, 1-8.	0.9	235
51	Multichannel Pulsed Doppler Signal Processing for Vascular Measurements in Mice. Ultrasound in Medicine and Biology, 2009, 35, 2042-2054.	0.7	24
52	Importance of pulsatility in hypertensive carotid artery growth and remodeling. Journal of Hypertension, 2009, 27, 2010-2021.	0.3	74
53	Integration of Heat Conduction Measurement Systems Into Engineering Technology Education. , 2005, , .		0
54	Modeling and Validation of Automotive â€œSmartâ€•Thermal Management System Architectures. , 0, , .		23