Andrew P Voorhees

List of Publications by Year
in descending order

26 papers	962 citations	623734 14 h-index	794594 19 g-index
27 all docs	27 docs citations	27 times ranked	1340 citing authors

#	Article	IF	Citations
1	Matrix Metalloproteinase-28 Deletion Exacerbates Cardiac Dysfunction and Rupture After Myocardial Infarction in Mice by Inhibiting M2 Macrophage Activation. Circulation Research, 2013, 112, 675-688.	4.5	187
2	Biomechanics of Cardiac Function. , 2015, 5, 1623-1644.		67
3	Myocardial Infarction Superimposed on Aging: MMP-9 Deletion Promotes M2 Macrophage Polarization. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2016, 71, 475-483.	3.6	62
4	Cerebrospinal Fluid Pressure: Revisiting Factors Influencing Optic Nerve Head Biomechanics. , 2018, 59, 154.		61
5	Building a better infarct: Modulation of collagen cross-linking to increase infarct stiffness and reduce left ventricular dilation post-myocardial infarction. Journal of Molecular and Cellular Cardiology, 2015, 85, 229-239.	1.9	59
6	Cardiac aging is initiated by matrix metalloproteinase-9-mediated endothelial dysfunction. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 306, H1398-H1407.	3.2	51
7	Effects of collagen microstructure and material properties on the deformation of the neural tissues of the lamina cribrosa. Acta Biomaterialia, 2017, 58, 278-290.	8.3	50
8	Complex variable methods for shape sensitivity of finite element models. Finite Elements in Analysis and Design, 2011, 47, 1146-1156.	3.2	47
9	Polarized light microscopy for 3â€dimensional mapping of collagen fiber architecture in ocular tissues. Journal of Biophotonics, 2018, 11, e201700356.	2.3	46
10	Lamina Cribrosa Pore Shape and Size as Predictors of Neural Tissue Mechanical Insult. , 2017, 58, 5336.		40
11	Formalin Fixation and Cryosectioning Cause Only Minimal Changes in Shape or Size of Ocular Tissues. Scientific Reports, 2017, 7, 12065.	3.3	36
12	Cardiac function of the naked mole-rat: ecophysiological responses to working underground. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 306, H730-H737.	3.2	32
13	A model to determine the effect of collagen fiber alignment on heart function post myocardial infarction. Theoretical Biology and Medical Modelling, 2014, 11, 6.	2.1	30
14	Microstructural Crimp of the Lamina Cribrosa and Peripapillary Sclera Collagen Fibers. , 2017, 58, 3378-3388.		27
15	Whole-globe biomechanics using high-field MRI. Experimental Eye Research, 2017, 160, 85-95.	2.6	26
16	Peripapillary sclera architecture revisited: A tangential fiber model and its biomechanical implications. Acta Biomaterialia, 2018, 79, 113-122.	8.3	24
17	Fatigue sensitivity analysis using complex variable methods. International Journal of Fatigue, 2012, 40, 61-73.	5.7	19
18	Role of radially aligned scleral collagen fibers in optic nerve head biomechanics. Experimental Eye Research, 2020, 199, 108188.	2.6	16

#	Article	IF	Citations
19	Bioreactor design for cornea tissue engineering: Materialâ€“cell interactions. Acta Biomaterialia, 2007, 3, 1041-1049.	8.3	15
20	Mathematical modeling of left ventricular dimensional changes in mice during aging. BMC Systems Biology, 2012, 6, S10.	3.0	15
21	So-Called Lamina Cribrosa Defects May Mitigate IOP-Induced Neural Tissue Insult. , 2020, 61, 15.		14
22	Lamina Cribrosa Capillaries Straighten as Intraocular Pressure Increases. , 2020, 61, 2.		12
23	Artery Remodeling Under Axial Twist in Three Days Organ Culture. Annals of Biomedical Engineering, 2015, 43, 1738-1747.	2.5	10
24	Seeing the Hidden Lamina: Effects of Exsanguination on the Optic Nerve Head. , 2018, 59, 2564.		7
25	Lamina cribrosa vessel and collagen beam networks are distinct. Experimental Eye Research, 2022, 215, 108916.	2.6	7
26	Eye-specific 3D modeling of factors influencing oxygen concentration in the lamina cribrosa. Experimental Eye Research, 2022, 220, 109105.	2.6	1