Rouzbeh Amini

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8920049/publications.pdf

Version: 2024-02-01

64	913	516561	526166
papers	citations	16	27
		h-index	g-index

65	65	65	764
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The role of elastin on the mechanical properties of the anterior leaflet in porcine tricuspid valves. PLoS ONE, 2022, 17, e0267131.	1.1	4
2	Accuracy of cardiacâ€induced brain motion measurement using displacementâ€encoding with stimulated echoes (DENSE) magnetic resonance imaging (MRI): A phantom study. Magnetic Resonance in Medicine, 2021, 85, 1237-1247.	1.9	15
3	Regional Brain Tissue Displacement and Strain is Elevated in Subjects with Chiari Malformation Type I Compared to Healthy Controls: A Study Using DENSE MRI. Annals of Biomedical Engineering, 2021, 49, 1462-1476.	1.3	13
4	Iris stromal cell nuclei deform to more elongated shapes during pharmacologically-induced miosis and mydriasis. Experimental Eye Research, 2021, 202, 108373.	1.2	2
5	Effects of enzyme-based removal of collagen and elastin constituents on the biaxial mechanical responses of porcine atrioventricular heart valve anterior leaflets. Acta Biomaterialia, 2021, 135, 425-440.	4.1	10
6	Cerebellar and Brainstem Displacement Measured with DENSE MRI in Chiari Malformation Following Posterior Fossa Decompression Surgery. Radiology, 2021, 301, 187-194.	3.6	20
7	The effects of â^'80â€Â°C short-term storage on the mechanical response of tricuspid valve leaflets. Journal of Biomechanics, 2020, 98, 109462.	0.9	16
8	Biomechanical Assessment of the Iris in Relation to Angle-Closure Glaucoma: A Multi-scale Computational Approach. Lecture Notes in Computational Vision and Biomechanics, 2020, , 470-482.	0.5	2
9	Self-Efficacy Versus Gender: Project-Based Active Learning Techniques in Biomedical Engineering Introductory Computer Programming Courses. Journal of Biomechanical Engineering, 2020, 142, .	0.6	2
10	A computational multi-scale approach to investigate mechanically-induced changes in tricuspid valve anterior leaflet microstructure. Acta Biomaterialia, 2019, 94, 524-535.	4.1	23
11	Mechanical Response Changes in Porcine Tricuspid Valve Anterior Leaflet Under Osmotic-Induced Swelling. Bioengineering, 2019, 6, 70.	1.6	8
12	Three-Dimensional CT Morphometric Image Analysis of the Clivus and Sphenoid Sinus in Chiari Malformation Type I. Annals of Biomedical Engineering, 2019, 47, 2284-2295.	1.3	15
13	Fluorinated Methacrylamide Chitosan Hydrogel Dressings Improve Regenerated Wound Tissue Quality in Diabetic Wound Healing. Advances in Wound Care, 2019, 8, 374-385.	2.6	28
14	Theoretical Assessment of the Risk of Ocular Hypotony in Patients With Intravitreal Gas Bubbles Who Travel Through Subsea Tunnels. Translational Vision Science and Technology, 2019, 8, 4.	1.1	2
15	Appropriate Objective Functions for Quantifying Iris Mechanical Properties Using Inverse Finite Element Modeling. Journal of Biomechanical Engineering, 2018, 140, .	0.6	10
16	Pressure-induced microstructural changes in porcine tricuspid valve leaflets. Acta Biomaterialia, 2018, 67, 248-258.	4.1	28
17	Anisotropic and nonlinear biaxial mechanical response of porcine small bowel mesentery. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 78, 154-163.	1.5	9
18	Dilation of tricuspid valve annulus immediately after rupture of chordae tendineae in ex-vivo porcine hearts. PLoS ONE, 2018, 13, e0206744.	1.1	13

#	Article	IF	Citations
19	Using Hands-On Physical Computing Projects to Teach Computer Programming to Biomedical Engineering Students. Journal of Biomechanical Engineering, 2018, 140, .	0.6	1
20	Engineered Airway Models to Study Liquid Plug Splitting at Bifurcations: Effects of Orientation and Airway Size. Journal of Biomechanical Engineering, 2018, 140, .	0.6	3
21	Regional Quantification of Brain Tissue Strain Using Displacement-Encoding With Stimulated Echoes Magnetic Resonance Imaging. Journal of Biomechanical Engineering, 2018, 140, .	0.6	24
22	Increased Iris Stiffness in Patients With a History of Angle-Closure Glaucoma: An Image-Based Inverse Modeling Analysis. , 2018, 59, 4134.		24
23	Quantification of Material Constants for a Phenomenological Constitutive Model of Porcine Tricuspid Valve Leaflets for Simulation Applications. Journal of Biomechanical Engineering, 2018, 140, .	0.6	16
24	An imaged-based inverse finite element method to determine mechanical properties of the human trabecular meshwork. Journal for Modeling in Ophthalmology, 2017, 1, 100-111.	0.1	6
25	Patients With Intravitreal Gas Bubbles at Risk of High Intraocular Pressure Without Exceeding Elevation of Surgery: Theoretical Analysis. , 2016, 57, 3340.		14
26	On the Biaxial Mechanical Response of Porcine Tricuspid Valve Leaflets. Journal of Biomechanical Engineering, 2016, 138, .	0.6	42
27	Surface Strains of Porcine Tricuspid Valve Septal Leaflets Measured in Ex Vivo Beating Hearts. Journal of Biomechanical Engineering, 2016, 138, .	0.6	28
28	Mesoscale Structural Models in the Growing Pulmonary Artery. , 2016, , 383-402.		1
29	Fabrication of elastomeric scaffolds with curvilinear fibrous structures for heart valve leaflet engineering. Journal of Biomedical Materials Research - Part A, 2015, 103, 3101-3106.	2.1	36
30	The impact of boundary conditions on surface curvature of polypropylene mesh in response to uniaxial loading. Journal of Biomechanics, 2015, 48, 1566-1574.	0.9	24
31	Mitral Valves: A Computational Framework. , 2015, , 223-255.		9
32	Pregnancy-Induced Remodeling of Collagen Architecture and Content in the Mitral Valve. Annals of Biomedical Engineering, 2014, 42, 2058-2071.	1.3	40
33	Insights Into Regional Adaptations in the Growing Pulmonary Artery Using a Meso-Scale Structural Model: Effects of Ascending Aorta Impingement. Journal of Biomechanical Engineering, 2014, 136, 021009.	0.6	33
34	A Method for Predicting Collagen Fiber Realignment in Non-Planar Tissue Surfaces as Applied to Glenohumeral Capsule During Clinically Relevant Deformation. Journal of Biomechanical Engineering, 2014, 136, 031003.	0.6	19
35	An inverse modeling approach for stress estimation in mitral valve anterior leaflet valvuloplasty for in-vivo valvular biomaterial assessment. Journal of Biomechanics, 2014, 47, 2055-2063.	0.9	78
36	The Impact of Boundary Conditions on Surface Curvature Measurements of Polypropylene Mesh in Response to Uniaxial Loading. , 2013, , .		1

#	Article	IF	Citations
37	Contribution of Different Anatomical and Physiologic Factors to Iris Contour and Anterior Chamber Angle Changes During Pupil Dilation: Theoretical Analysis. , 2013, 54, 2977.		19
38	A High-Fidelity and Micro-anatomically Accurate 3D Finite Element Model for Simulations of Functional Mitral Valve. Lecture Notes in Computer Science, 2013, 7945, 416-424.	1.0	23
39	Increased irisâ€“lens contact following spontaneous blinking: Mathematical modeling. Journal of Biomechanics, 2012, 45, 2293-2296.	0.9	18
40	The Posterior Location of the Dilator Muscle Induces Anterior Iris Bowing during Dilation, Even in the Absence of Pupillary Block. , 2012, 53, 1188.		24
41	On the In Vivo Deformation of the Mitral Valve Anterior Leaflet: Effects of Annular Geometry and Referential Configuration. Annals of Biomedical Engineering, 2012, 40, 1455-1467.	1.3	89
42	Integration of Microstructural Architecture of the Mitral Valve Into an Anatomically Accurate Finite Element Mesh. , 2012, , .		1
43	Alterations in the Microstructure of the Anterior Mitral Valve Leaflet Under Physiological Stress. , 2012, , .		8
44	A Method for Predicting Collagen Fiber Alignment in the Glenohumeral Capsule During Clinically Relevant Deformations. , 2012, , .		0
45	Contribution of Different Physiological and Anatomical Factors to the Anterior Chamber Angle During Pupil Dilation. , 2012, , .		0
46	Anteriorâ€“posterior asymmetry in iris mechanics measured by indentation. Experimental Eye Research, 2011, 93, 475-481.	1.2	30
47	COMPUTATIONAL SIMULATION OF ALTITUDE CHANGE-INDUCED INTRAOCULAR PRESSURE ALTERATION IN PATIENTS WITH INTRAVITREAL GAS BUBBLES. Retina, 2011, 31, 1656-1663.	1.0	14
48	Anterior Chamber Angle and Iris-Lens Contact Alteration During Pupillary Dilation. , 2011, , .		0
49	Functional Dynamic In-Vivo Stresses of the Mitral Valve Anterior Leaflet. , 2011, , .		0
50	Physiological Micromechanics of the Anterior Mitral Valve Leaflet. , 2011, , .		0
51	Reverse Pupillary Block Slows Iris Contour Recovery From Corneoscleral Indentation. Journal of Biomechanical Engineering, 2010, 132, 071010.	0.6	20
52	Elasticity of the Porcine Lens Capsule as Measured by Osmotic Swelling. Journal of Biomechanical Engineering, 2010, 132, 091008.	0.6	12
53	Intraocular Pressure Alters Following Altitude Changes in Patients With Gas-Filled Eyes: Theoretical Analysis. , 2010, , .		0
54	Patient-Specific Model of Iris Mechanics. , 2010, , .		0

#	Article	IF	Citations
55	Elasticity of the Lens Capsule as Measured by Osmotic Swelling. , 2010, , .		0
56	Does Spontaneous Blinking Increase Iris-Lens Contact?. , 2010, , .		0
57	Quantification of iris concavity. Journal of Ophthalmic and Vision Research, 2010, 5, 211-2.	0.7	5
58	Anterior Chamber Angle Opening during Corneoscleral Indentation: The Mechanism of Whole Eye Globe Deformation and the Importance of the Limbus. , 2009, 50, 5288.		29
59	Mechanical Properties of the Iris Dilator and Stroma Using Nanoindentation. , 2009, , .		0
60	The Effect of the Posterior Location of the Dilator on the Iris Concavity. , 2009, , .		1
61	Board 1: Work in Progress: Using Video Tutorials to Assist Biomedical Engineering Students in Learning Solid Modeling Skills. , 0, , .		0
62	Board 25: Work in Progress: Mandatory Attendance in Office Hours to Improve Studentsâ€™ Learning Experience. , 0, , .		0
63	Project-Based Active Learning Techniques Enhance Computer Programming Academic and Career Self-Efficacy of Undergraduate Biomedical Engineering Students. , 0, , .		1
64	Learning two programming languages in one semester does not adversely affect undergraduate biomedical engineering student performance. , 0, , .		0