Will Zhang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8132084/publications.pdf

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22	817	471371	677027
papers	citations	17 h-index	22 g-index

23	23	23	845
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Structural and Mechanical Adaptations of Right Ventricle Free Wall Myocardium to Pressure Overload. Annals of Biomedical Engineering, 2014, 42, 2451-2465.	1.3	89
2	A novel crosslinking method for improved tear resistance andÂbiocompatibility of tissue based biomaterials. Biomaterials, 2015, 66, 83-91.	5.7	77
3	A meso-scale layer-specific structural constitutive model of the mitral heart valve leaflets. Acta Biomaterialia, 2016, 32, 238-255.	4.1	64
4	Biomechanical Behavior of Bioprosthetic Heart Valve Heterograft Tissues: Characterization, Simulation, and Performance. Cardiovascular Engineering and Technology, 2016, 7, 309-351.	0.7	61
5	A novel constitutive model for passive right ventricular myocardium: evidence for myofiberâ€“collagen fiber mechanical coupling. Biomechanics and Modeling in Mechanobiology, 2017, 16, 561-581.	1.4	61
6	Fixation of Bovine Pericardium-Based Tissue Biomaterial with Irreversible Chemistry Improves Biochemical and Biomechanical Properties. Journal of Cardiovascular Translational Research, 2017, 10, 194-205.	1.1	53
7	On the Presence of Affine Fibril and Fiber Kinematics in the Mitral Valve Anterior Leaflet. Biophysical Journal, 2015, 108, 2074-2087.	0.2	49
8	On the Simulation of Mitral Valve Function in Health, Disease, and Treatment. Journal of Biomechanical Engineering, 2019, 141, .	0.6	45
9	A novel fibre-ensemble level constitutive model for exogenous cross-linked collagenous tissues. Interface Focus, 2016, 6, 20150090.	1.5	41
10	A Generalized Method for the Analysis of Planar Biaxial Mechanical Data Using Tethered Testing Configurations. Journal of Biomechanical Engineering, 2015, 137, 064501.	0.6	35
11	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
12	Modeling the response of exogenously crosslinked tissue to cyclic loading: The effects of permanent set. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 75, 336-350.	1.5	31
13	An efficient and accurate method for modeling nonlinear fractional viscoelastic biomaterials. Computer Methods in Applied Mechanics and Engineering, 2020, 362, 112834.	3.4	29
14	On the in vivo function of the mitral heart valve leaflet: insights into tissueâ€“interstitial cell biomechanical coupling. Biomechanics and Modeling in Mechanobiology, 2017, 16, 1613-1632.	1.4	25
15	A viscoelastic model for human myocardium. Acta Biomaterialia, 2021, 135, 441-457.	4.1	23
16	Comparative Analysis of Nonlinear Viscoelastic Models Across Common Biomechanical Experiments. Journal of Elasticity, 2021, 145, 117-152.	0.9	22
17	Large strain stimulation promotes extracellular matrix production and stiffness in an elastomeric scaffold model. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 62, 619-635.	1.5	19
18	A material modeling approach for the effective response of planar soft tissues for efficient computational simulations. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 89, 168-198.	1.5	18

#	Article	IF	Citations
19	A mathematical model for the determination of forming tissue moduli in needled-nonwoven scaffolds. Acta Biomaterialia, 2017, 51, 220-236.	4.1	14
20	Simulating the time evolving geometry, mechanical properties, and fibrous structure of bioprosthetic heart valve leaflets under cyclic loading. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 123, 104745.	1.5	13
21	The effects of viscoelasticity on residual strain in aortic soft tissues. Acta Biomaterialia, 2022, 140, 398-411.	4.1	13
22	Fluidâ€“Structure Interaction Analysis of Bioprosthetic Heart Valves: the Application of a Computationally-Efficient Tissue Constitutive Model. , 2018, , 447-469.		1