

Michael S Sacks

List of Publications by Citations

Source: <https://exaly.com/author-pdf/3694009/michael-s-sacks-publications-by-citations.pdf>
Version: 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

140 papers	6,694 citations	42 h-index	79 g-index
149 ext. papers	7,600 ext. citations	4.5 avg, IF	6.23 L-index

#	Paper	IF	Citations
140	Incorporation of experimentally-derived fiber orientation into a structural constitutive model for planar collagenous tissues. <i>Journal of Biomechanical Engineering</i> , 2003 , 125, 280-7	2.1	296
139	Biaxial mechanical properties of the native and glutaraldehyde-treated aortic valve cusp: Part II--A structural constitutive model. <i>Journal of Biomechanical Engineering</i> , 2000 , 122, 327-35	2.1	294
138	Biaxial Mechanical Evaluation of Planar Biological Materials. <i>Journal of Elasticity</i> , 2000 , 61, 199-246	1.5	287
137	An immersogeometric variational framework for fluid-structure interaction: application to bioprosthetic heart valves. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015 , 284, 1005-1053	5.7	271
136	On the biomechanics of heart valve function. <i>Journal of Biomechanics</i> , 2009 , 42, 1804-24	2.9	267
135	Heart valve function: a biomechanical perspective. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2007 , 362, 1369-91	5.8	267
134	Multiaxial mechanical behavior of biological materials. <i>Annual Review of Biomedical Engineering</i> , 2003 , 5, 251-84	12	228
133	A small angle light scattering device for planar connective tissue microstructural analysis. <i>Annals of Biomedical Engineering</i> , 1997 , 25, 678-89	4.7	227
132	Bioengineering challenges for heart valve tissue engineering. <i>Annual Review of Biomedical Engineering</i> , 2009 , 11, 289-313	12	208
131	Fluid-structure interaction analysis of bioprosthetic heart valves: Significance of arterial wall deformation. <i>Computational Mechanics</i> , 2014 , 54, 1055-1071	4	184
130	Correlation between heart valve interstitial cell stiffness and transvalvular pressure: implications for collagen biosynthesis. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006 , 290, H224-31	5.2	170
129	Dynamic and fluid-structure interaction simulations of bioprosthetic heart valves using parametric design with T-splines and Fung-type material models. <i>Computational Mechanics</i> , 2015 , 55, 1211-1225	4	158
128	Synergistic effects of cyclic tension and transforming growth factor-beta1 on the aortic valve myofibroblast. <i>Cardiovascular Pathology</i> , 2007 , 16, 268-76	3.8	139
127	Biaxial stress-stretch behavior of the mitral valve anterior leaflet at physiologic strain rates. <i>Annals of Biomedical Engineering</i> , 2006 , 34, 315-25	4.7	138
126	Electromechanical cardioplasty using a wrapped elasto-conductive epicardial mesh. <i>Science Translational Medicine</i> , 2016 , 8, 344ra86	17.5	136
125	Collagen fiber disruption occurs independent of calcification in clinically explanted bioprosthetic heart valves. <i>Journal of Biomedical Materials Research Part B</i> , 2002 , 62, 359-71		133
124	Quantification of the fiber architecture and biaxial mechanical behavior of porcine intestinal submucosa. <i>Journal of Biomedical Materials Research Part B</i> , 1999 , 46, 1-10		124

123	Orthotropic mechanical properties of chemically treated bovine pericardium. <i>Annals of Biomedical Engineering</i> , 1998 , 26, 892-902	4.7	121
122	In-vivo dynamic deformation of the mitral valve anterior leaflet. <i>Annals of Thoracic Surgery</i> , 2006 , 82, 1369-77	2.7	111
121	Mechanisms of bioprosthetic heart valve failure: fatigue causes collagen denaturation and glycosaminoglycan loss. <i>Journal of Biomedical Materials Research Part B</i> , 1999 , 46, 44-50		110
120	The aortic valve microstructure: effects of transvalvular pressure. <i>Journal of Biomedical Materials Research Part B</i> , 1998 , 41, 131-41		109
119	The effects of cellular contraction on aortic valve leaflet flexural stiffness. <i>Journal of Biomechanics</i> , 2006 , 39, 88-96	2.9	96
118	Simulation of planar soft tissues using a structural constitutive model: Finite element implementation and validation. <i>Journal of Biomechanics</i> , 2014 , 47, 2043-54	2.9	95
117	The relation between collagen fibril kinematics and mechanical properties in the mitral valve anterior leaflet. <i>Journal of Biomechanical Engineering</i> , 2007 , 129, 78-87	2.1	94
116	In vivo three-dimensional surface geometry of abdominal aortic aneurysms. <i>Annals of Biomedical Engineering</i> , 1999 , 27, 469-79	4.7	87
115	Planar biaxial creep and stress relaxation of the mitral valve anterior leaflet. <i>Annals of Biomedical Engineering</i> , 2006 , 34, 1509-18	4.7	86
114	On the in vivo deformation of the mitral valve anterior leaflet: effects of annular geometry and referential configuration. <i>Annals of Biomedical Engineering</i> , 2012 , 40, 1455-67	4.7	78
113	In-situ deformation of the aortic valve interstitial cell nucleus under diastolic loading. <i>Journal of Biomechanical Engineering</i> , 2007 , 129, 880-89	2.1	73
112	A novel crosslinking method for improved tear resistance and biocompatibility of tissue based biomaterials. <i>Biomaterials</i> , 2015 , 66, 83-91	15.6	63
111	Dynamic in vitro quantification of bioprosthetic heart valve leaflet motion using structured light projection. <i>Annals of Biomedical Engineering</i> , 2001 , 29, 963-73	4.7	62
110	An inverse modeling approach for stress estimation in mitral valve anterior leaflet valvuloplasty for in-vivo valvular biomaterial assessment. <i>Journal of Biomechanics</i> , 2014 , 47, 2055-63	2.9	60
109	Heart Valve Biomechanics and Underlying Mechanobiology. <i>Comprehensive Physiology</i> , 2016 , 6, 1743-1780	4.7	56
108	From single fiber to macro-level mechanics: A structural finite-element model for elastomeric fibrous biomaterials. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014 , 39, 146-61	4.1	56
107	Effect of Geometry on the Leaflet Stresses in Simulated Models of Congenital Bicuspid Aortic Valves. <i>Cardiovascular Engineering and Technology</i> , 2011 , 2, 48-56	2.2	56
106	A framework for designing patient-specific bioprosthetic heart valves using immersogeometric fluid-structure interaction analysis. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2018 , 34, e2938	2.6	56

105	Immersogeometric cardiovascular fluid-structure interaction analysis with divergence-conforming B-splines. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017 , 314, 408-472	5.7	52
104	Optimal bovine pericardial tissue selection sites. I. Fiber architecture and tissue thickness measurements. <i>Journal of Biomedical Materials Research Part B</i> , 1998 , 39, 207-14		52
103	A meso-scale layer-specific structural constitutive model of the mitral heart valve leaflets. <i>Acta Biomaterialia</i> , 2016 , 32, 238-255	10.8	47
102	On the effects of leaflet microstructure and constitutive model on the closing behavior of the mitral valve. <i>Biomechanics and Modeling in Mechanobiology</i> , 2015 , 14, 1281-302	3.8	46
101	On the presence of affine fibril and fiber kinematics in the mitral valve anterior leaflet. <i>Biophysical Journal</i> , 2015 , 108, 2074-87	2.9	44
100	Quantification and simulation of layer-specific mitral valve interstitial cells deformation under physiological loading. <i>Journal of Theoretical Biology</i> , 2015 , 373, 26-39	2.3	43
99	Biomechanical Behavior of Bioprosthetic Heart Valve Heterograft Tissues: Characterization, Simulation, and Performance. <i>Cardiovascular Engineering and Technology</i> , 2016 , 7, 309-351	2.2	43
98	A novel constitutive model for passive right ventricular myocardium: evidence for myofiber-collagen fiber mechanical coupling. <i>Biomechanics and Modeling in Mechanobiology</i> , 2017 , 16, 561-581	3.8	41
97	Surface geometric analysis of anatomic structures using biquintic finite element interpolation. <i>Annals of Biomedical Engineering</i> , 2000 , 28, 598-611	4.7	38
96	Ex Vivo Methods for Informing Computational Models of the Mitral Valve. <i>Annals of Biomedical Engineering</i> , 2017 , 45, 496-507	4.7	36
95	Noggin attenuates the osteogenic activation of human valve interstitial cells in aortic valve sclerosis. <i>Cardiovascular Research</i> , 2013 , 98, 402-10	9.9	36
94	Quantification of the collagen fibre architecture of human cranial dura mater. <i>Journal of Anatomy</i> , 1998 , 192 (Pt 1), 99-106	2.9	36
93	Optimal bovine pericardial tissue selection sites. II. Cartographic analysis. <i>Journal of Biomedical Materials Research Part B</i> , 1998 , 39, 215-21		34
92	A novel fibre-ensemble level constitutive model for exogenous cross-linked collagenous tissues. <i>Interface Focus</i> , 2016 , 6, 20150090	3.9	34
91	Mitral valve leaflet remodelling during pregnancy: insights into cell-mediated recovery of tissue homeostasis. <i>Journal of the Royal Society Interface</i> , 2016 , 13,	4.1	33
90	A functionally graded material model for the transmural stress distribution of the aortic valve leaflet. <i>Journal of Biomechanics</i> , 2017 , 54, 88-95	2.9	32
89	Osteopontin-CD44v6 interaction mediates calcium deposition via phospho-Akt in valve interstitial cells from patients with noncalcified aortic valve sclerosis. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2014 , 34, 2086-94	9.4	32
88	Bioprosthetic heart valve heterograft biomaterials: structure, mechanical behavior and computational simulation. <i>Expert Review of Medical Devices</i> , 2006 , 3, 817-34	3.5	32

87	Computational methods for the aortic heart valve and its replacements. <i>Expert Review of Medical Devices</i> , 2017 , 14, 849-866	3.5	31
86	A structural constitutive model for chemically treated planar tissues under biaxial loading. <i>Computational Mechanics</i> , 2000 , 26, 243-249	4	31
85	Regulation of valve interstitial cell homeostasis by mechanical deformation: implications for heart valve disease and surgical repair. <i>Journal of the Royal Society Interface</i> , 2017 , 14,	4.1	30
84	Polarized light spatial frequency domain imaging for non-destructive quantification of soft tissue fibrous structures. <i>Biomedical Optics Express</i> , 2015 , 6, 1520-33	3.5	30
83	Pregnancy-induced remodeling of collagen architecture and content in the mitral valve. <i>Annals of Biomedical Engineering</i> , 2014 , 42, 2058-71	4.7	30
82	Scaling digital twins from the artisanal to the industrial. <i>Nature Computational Science</i> , 2021 , 1, 313-320		30
81	Collagen fiber orientation as quantified by small angle light scattering in wounds treated with transforming growth factor-beta2 and its neutralizing antibody. <i>Wound Repair and Regeneration</i> , 1999 , 7, 179-86	3.6	29
80	Geometric characterization and simulation of planar layered elastomeric fibrous biomaterials. <i>Acta Biomaterialia</i> , 2015 , 12, 93-101	10.8	28
79	An anisotropic constitutive model for immersogeometric fluid-structure interaction analysis of bioprosthetic heart valves. <i>Journal of Biomechanics</i> , 2018 , 74, 23-31	2.9	28
78	Fabrication of elastomeric scaffolds with curvilinear fibrous structures for heart valve leaflet engineering. <i>Journal of Biomedical Materials Research - Part A</i> , 2015 , 103, 3101-6	5.4	28
77	Insights into regional adaptations in the growing pulmonary artery using a meso-scale structural model: effects of ascending aorta impingement. <i>Journal of Biomechanical Engineering</i> , 2014 , 136, 021009	3.1	28
76	Mitral Valve Chordae Tendineae: Topological and Geometrical Characterization. <i>Annals of Biomedical Engineering</i> , 2017 , 45, 378-393	4.7	26
75	A comprehensive pipeline for multi-resolution modeling of the mitral valve: Validation, computational efficiency, and predictive capability. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2018 , 34, e2921	2.6	25
74	A Contemporary Look at Biomechanical Models of Myocardium. <i>Annual Review of Biomedical Engineering</i> , 2019 , 21, 417-442	12	24
73	Modeling the response of exogenously crosslinked tissue to cyclic loading: The effects of permanent set. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017 , 75, 336-350	4.1	24
72	An integrated inverse model-experimental approach to determine soft tissue three-dimensional constitutive parameters: application to post-infarcted myocardium. <i>Biomechanics and Modeling in Mechanobiology</i> , 2018 , 17, 31-53	3.8	23
71	Biomechanical and Hemodynamic Measures of Right Ventricular Diastolic Function: Translating Tissue Biomechanics to Clinical Relevance. <i>Journal of the American Heart Association</i> , 2017 , 6,	6	22
70	Thinner biological tissues induce leaflet flutter in aortic heart valve replacements. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 19007-19016	11.5	21

69	A noninvasive method for the determination of in vivo mitral valve leaflet strains. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2018 , 34, e3142	2.6	20
68	A triphasic constrained mixture model of engineered tissue formation under in vitro dynamic mechanical conditioning. <i>Biomechanics and Modeling in Mechanobiology</i> , 2016 , 15, 293-316	3.8	19
67	On the simulation of mitral valve function in health, disease, and treatment. <i>Journal of Biomechanical Engineering</i> , 2019 ,	2.1	18
66	Non-Destructive Reflectance Mapping of Collagen Fiber Alignment in Heart Valve Leaflets. <i>Annals of Biomedical Engineering</i> , 2019 , 47, 1250-1264	4.7	18
65	Patient-Specific Modeling of Heart Valves: From Image to Simulation. <i>Lecture Notes in Computer Science</i> , 2013 , 7945, 141-149	0.9	18
64	Transmural remodeling of right ventricular myocardium in response to pulmonary arterial hypertension. <i>APL Bioengineering</i> , 2017 , 1,	6.6	18
63	In vivo biomechanical assessment of triglycidylamine crosslinked pericardium. <i>Biomaterials</i> , 2007 , 28, 5390-8	15.6	18
62	On the in vivo function of the mitral heart valve leaflet: insights into tissue-interstitial cell biomechanical coupling. <i>Biomechanics and Modeling in Mechanobiology</i> , 2017 , 16, 1613-1632	3.8	17
61	Large strain stimulation promotes extracellular matrix production and stiffness in an elastomeric scaffold model. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016 , 62, 619-635	4.1	17
60	GENE EXPRESSION AND COLLAGEN FIBER MICROMECHANICAL INTERACTIONS OF THE SEMILUNAR HEART VALVE INTERSTITIAL CELL. <i>Cellular and Molecular Bioengineering</i> , 2012 , 5, 254-265	3.9	17
59	Development of a Functionally Equivalent Model of the Mitral Valve Chordae Tendineae Through Topology Optimization. <i>Annals of Biomedical Engineering</i> , 2019 , 47, 60-74	4.7	16
58	A Computational Cardiac Model for the Adaptation to Pulmonary Arterial Hypertension in the Rat. <i>Annals of Biomedical Engineering</i> , 2019 , 47, 138-153	4.7	16
57	An inverse modeling approach for semilunar heart valve leaflet mechanics: exploitation of tissue structure. <i>Biomechanics and Modeling in Mechanobiology</i> , 2016 , 15, 909-32	3.8	14
56	On the Functional Role of Valve Interstitial Cell Stress Fibers: A Continuum Modeling Approach. <i>Journal of Biomechanical Engineering</i> , 2017 , 139,	2.1	14
55	Biology and Biomechanics of the Heart Valve Extracellular Matrix. <i>Journal of Cardiovascular Development and Disease</i> , 2020 , 7,	4.2	14
54	Multi-resolution geometric modeling of the mitral heart valve leaflets. <i>Biomechanics and Modeling in Mechanobiology</i> , 2018 , 17, 351-366	3.8	14
53	A mathematical model for the determination of forming tissue moduli in needled-nonwoven scaffolds. <i>Acta Biomaterialia</i> , 2017 , 51, 220-236	10.8	13
52	The Three-Dimensional Microenvironment of the Mitral Valve: Insights into the Effects of Physiological Loads. <i>Cellular and Molecular Bioengineering</i> , 2018 , 11, 291-306	3.9	13

51	Quantifying heart valve interstitial cell contractile state using highly tunable poly(ethylene glycol) hydrogels. <i>Acta Biomaterialia</i> , 2019 , 96, 354-367	10.8	13
50	Computational investigation of left ventricular hemodynamics following bioprosthetic aortic and mitral valve replacement. <i>Mechanics Research Communications</i> , 2021 , 112,	2.2	13
49	On intrinsic stress fiber contractile forces in semilunar heart valve interstitial cells using a continuum mixture model. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016 , 54, 244-58	4.1	12
48	Insights into the passive mechanical behavior of left ventricular myocardium using a robust constitutive model based on full 3D kinematics. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020 , 103, 103508	4.1	12
47	A material modeling approach for the effective response of planar soft tissues for efficient computational simulations. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019 , 89, 168-198	4.1	12
46	Layered Elastomeric Fibrous Scaffolds: An In-Silico Study of the Achievable Range of Mechanical Behaviors. <i>ACS Biomaterials Science and Engineering</i> , 2017 , 3, 2907-2921	5.5	9
45	Perspectives on Sharing Models and Related Resources in Computational Biomechanics Research. <i>Journal of Biomechanical Engineering</i> , 2018 , 140,	2.1	8
44	Mechanobiology of the heart valve interstitial cell: Simulation, experiment, and discovery 2018 , 249-283		8
43	Mitral valve leaflet response to ischaemic mitral regurgitation: from gene expression to tissue remodelling. <i>Journal of the Royal Society Interface</i> , 2020 , 17, 20200098	4.1	7
42	A Novel Small-Specimen Planar Biaxial Testing System With Full In-Plane Deformation Control. <i>Journal of Biomechanical Engineering</i> , 2018 , 140,	2.1	7
41	Alterations in the Microstructure of the Anterior Mitral Valve Leaflet Under Physiological Stress 2012 ,		7
40	Color structured light imaging of skin. <i>Journal of Biomedical Optics</i> , 2016 , 21, 50503	3.5	7
39	On the in vivo systolic compressibility of left ventricular free wall myocardium in the normal and infarcted heart. <i>Journal of Biomechanics</i> , 2020 , 107, 109767	2.9	6
38	Development of Tissue Engineered Heart Valves for Percutaneous Transcatheter Delivery in a Fetal Ovine Model. <i>JACC Basic To Translational Science</i> , 2020 , 5, 815-828	8.7	6
37	How hydrogel inclusions modulate the local mechanical response in early and fully formed post-infarcted myocardium. <i>Acta Biomaterialia</i> , 2020 , 114, 296-306	10.8	6
36	Isogeometric finite element-based simulation of the aortic heart valve: Integration of neural network structural material model and structural tensor fiber architecture representations. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2021 , 37, e3438	2.6	6
35	The aortic valve microstructure: Effects of transvalvular pressure 1998 , 41, 131		6
34	On the role of predicted in vivo mitral valve interstitial cell deformation on its biosynthetic behavior. <i>Biomechanics and Modeling in Mechanobiology</i> , 2021 , 20, 135-144	3.8	5

33	A new computational framework for anatomically consistent 3D statistical shape analysis with clinical imaging applications. <i>Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization</i> , 2013 , 1, 13-27	0.9	4
32	A structural constitutive model for the native pulmonary valve. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2004 , 2004, 3734-6		3
31	Modeling of Myocardium Compressibility and its Impact in Computational Simulations of the Healthy and Infarcted Heart. <i>Lecture Notes in Computer Science</i> , 2017 , 10263, 493-501	0.9	3
30	Pre-surgical Prediction of Ischemic Mitral Regurgitation Recurrence Using In Vivo Mitral Valve Leaflet Strains. <i>Annals of Biomedical Engineering</i> , 2021 , 1	4.7	3
29	Regional biomechanical imaging of liver cancer cells. <i>Journal of Cancer</i> , 2019 , 10, 4481-4487	4.5	3
28	FM-Track: A fiducial marker tracking software for studying cell mechanics in a three-dimensional environment. <i>SoftwareX</i> , 2020 , 11,	2.7	2
27	Analyzing valve interstitial cell mechanics and geometry with spatial statistics. <i>Journal of Biomechanics</i> , 2019 , 93, 159-166	2.9	2
26	Patient-Specific Quantification of Normal and Bicuspid Aortic Valve Leaflet Deformations from Clinically Derived Images.. <i>Annals of Biomedical Engineering</i> , 2022 , 50, 1-15	4.7	2
25	A Review on the Biomechanical Effects of Fatigue on the Porcine Bioprosthetic Heart Valve. <i>Journal of Long-Term Effects of Medical Implants</i> , 2017 , 27, 181-197	0.2	2
24	The impact of myocardial compressibility on organ-level simulations of the normal and infarcted heart. <i>Scientific Reports</i> , 2021 , 11, 13466	4.9	2
23	On Valve Interstitial Cell Signaling: The Link Between Multiscale Mechanics and Mechanobiology. <i>Cardiovascular Engineering and Technology</i> , 2021 , 12, 15-27	2.2	2
22	Transcatheter Heart Valve Downstream Fluid Dynamics in an Accelerated Evaluation Environment. <i>Annals of Biomedical Engineering</i> , 2021 , 49, 2170-2182	4.7	2
21	A preliminary study of the local biomechanical environment of liver tumors in vivo. <i>Medical Physics</i> , 2019 , 46, 1728-1739	4.4	1
20	Parameter estimation of heart valve leaflet hyperelastic mechanical behavior using an inverse modeling approach 2014 ,		1
19	The Intrinsic Fatigue Mechanism of the Porcine Aortic Valve Extracellular Matrix. <i>Cardiovascular Engineering and Technology</i> , 2012 , 3, 62-72	2.2	1
18	Modeling the Role of Oscillator Flow and Dynamic Mechanical Conditioning on Dense Connective Tissue Formation in Mesenchymal Stem Cell-Derived Heart Valve Tissue Engineering. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2013 , 7, 0409271-409272	1.3	1
17	Anisotropic elastic behavior of a hydrogel-coated electrospun polyurethane: Suitability for heart valve leaflets. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022 , 125, 104877	4.1	1
16	On the Three-Dimensional Correlation Between Myofibroblast Shape and Contraction. <i>Journal of Biomechanical Engineering</i> , 2021 , 143,	2.1	1

15	Altered Responsiveness to TGF β and BMP and Increased CD45+ Cell Presence in Mitral Valves Are Unique Features of Ischemic Mitral Regurgitation. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2021 , 41, 2049-2062	9.4	1
14	Adventures in Heart Valve Function A Personal Thank You to Dr. Ajit P. Yoganathan. <i>Cardiovascular Engineering and Technology</i> , 2021 , 1	2.2	1
13	Biological Mechanics of the Heart Valve Interstitial Cell 2018 , 3-36		1
12	Simultaneous Wide-Field Planar Strain-Fiber Orientation Distribution Measurement Using Polarized Spatial Domain Imaging.. <i>Annals of Biomedical Engineering</i> , 2022 , 50, 253	4.7	0
11	Multi-scale Modeling of the Heart Valve Interstitial Cell. <i>Studies in Mechanobiology, Tissue Engineering and Biomaterials</i> , 2020 , 21-53	0.5	0
10	Virtual heart guides cardiac ablation. <i>Nature Biomedical Engineering</i> , 2018 , 2, 711-712	19	0
9	Simulating the time evolving geometry, mechanical properties, and fibrous structure of bioprosthetic heart valve leaflets under cyclic loading. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021 , 123, 104745	4.1	0
8	Mechanical Interaction of the Pericardium and Cardiac Function in the Normal and Hypertensive Rat Heart.. <i>Frontiers in Physiology</i> , 2022 , 13, 878861	4.6	0
7	Biomechanics of Diabetic Bladders. <i>LUTS: Lower Urinary Tract Symptoms</i> , 2009 , 1, S94-S97	1.9	
6	The Journal of Biomechanical Engineering The Next Step. <i>Journal of Biomechanical Engineering</i> , 2007 , 129, 801-801	2.1	
5	Four-dimensional Ultrasound for Characterization of In Vivo Murine Aortic Valve Dynamics. <i>Structural Heart</i> , 2021 , 5, 27-27	0.6	
4	On the shape and structure of the murine pulmonary heart valve. <i>Scientific Reports</i> , 2021 , 11, 14078	4.9	
3	A High-Fidelity 3D Micromechanical Model of Ventricular Myocardium. <i>Lecture Notes in Computer Science</i> , 2021 , 12738, 168-177	0.9	
2	Towards Patient-Specific Mitral Valve Surgical Simulations 2018 , 471-487		
1	On the Three-Dimensional Mechanical Behavior of Human Breast Tissue.. <i>Annals of Biomedical Engineering</i> , 2022 , 50, 601	4.7	