Dalin Tang

List of Publications by Year
in descending order

143 papers	3,311 citations	147566 31 h-index	168136 53 g-index
147 all docs	147 docs citations	147 times ranked	2305 citing authors

#	Article	IF	Citations
1	3D MRI-Based Multicomponent FSI Models for Atherosclerotic Plaques. Annals of Biomedical Engineering, 2004, 32, 947-960.	1.3	196
2	Expert recommendations on the assessment of wall shear stress in human coronary arteries: existing methodologies, technical considerations, and clinical applications. European Heart Journal, 2019, 40, 3421-3433.	1.0	178
3	Sites of Rupture in Human Atherosclerotic Carotid Plaques Are Associated With High Structural Stresses. Stroke, 2009, 40, 3258-3263.	1.0	165
4	Quantifying Effects of Plaque Structure and Material Properties on Stress Distributions in Human Atherosclerotic Plaques Using 3D FSI Models. Journal of Biomechanical Engineering, 2005, 127, 1185-1194.	0.6	114
5	Effect of Stenosis Asymmetry on Blood Flow and Artery Compression: A Three-Dimensional Fluid-Structure Interaction Model. Annals of Biomedical Engineering, 2003, 31, 1182-1193.	1.3	111
6	Effect of a Lipid Pool on Stress/Strain Distributions in Stenotic Arteries: 3-D Fluid-Structure Interactions (FSI) Models. Journal of Biomechanical Engineering, 2004, 126, 363-370.	0.6	111
7	Local Maximal Stress Hypothesis and Computational Plaque Vulnerability Index for Atherosclerotic Plaque Assessment. Annals of Biomedical Engineering, 2005, 33, 1789-1801.	1.3	108
8	A negative correlation between human carotid atherosclerotic plaque progression and plaque wall stress: In vivo MRI-based 2D/3D FSI models. Journal of Biomechanics, 2008, 41, 727-736.	0.9	108
9	Steady Flow and Wall Compression in Stenotic Arteries: A Three-Dimensional Thick-Wall Model With Fluidâ€“Wall Interactions. Journal of Biomechanical Engineering, 2001, 123, 548-557.	0.6	101
10	An experimental study on the ultimate strength of the adventitia and media of human atherosclerotic carotid arteries in circumferential and axial directions. Journal of Biomechanics, 2009, 42, 2535-2539.	0.9	99
11	<i>In Vivo</i> IVUS-Based 3-D Fluidâ€“Structure Interaction Models With Cyclic Bending and Anisotropic Vessel Properties for Human Atherosclerotic Coronary Plaque Mechanical Analysis. IEEE Transactions on Biomedical Engineering, 2009, 56, 2420-2428.	2.5	91
12	A 3-D thin-wall model with fluidâ€“structure interactions for blood flow in carotid arteries with symmetric and asymmetric stenoses. Computers and Structures, 1999, 72, 357-377.	2.4	84
13	Planar biaxial characterization of diseased human coronary and carotid arteries for computational modeling. Journal of Biomechanics, 2012, 45, 790-798.	0.9	81
14	3D MRI-Based Anisotropic FSI Models With Cyclic Bending for Human Coronary Atherosclerotic Plaque Mechanical Analysis. Journal of Biomechanical Engineering, 2009, 131, 061010.	0.6	77
15	3D Critical Plaque Wall Stress Is a Better Predictor of Carotid Plaque Rupture Sites Than Flow Shear Stress: An In Vivo MRI-Based 3D FSI Study. Journal of Biomechanical Engineering, 2010, 132, 031007.	0.6	72
16	Advanced human carotid plaque progression correlates positively with flow shear stress using follow-up scan data: An in vivo MRI multi-patient 3D FSI study. Journal of Biomechanics, 2010, 43, 2530-2538.	0.9	64
17	Simulating cyclic artery compression using a 3D unsteady model with fluidâ€“structure interactions. Computers and Structures, 2002, 80, 1651-1665.	2.4	62
18	Image-based modeling for better understanding and assessment of atherosclerotic plaque progression and vulnerability: Data, modeling, validation, uncertainty and predictions. Journal of Biomechanics, 2014, 47, 834-846.	0.9	59

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19	Local critical stress correlates better than global maximum stress with plaque morphological features linked to atherosclerotic plaque vulnerability: an in vivo multi-patient study. BioMedical Engineering OnLine, 2009, 8, 15.	1.3	57
20	Image-based patient-specific ventricle models with fluidâ€“structure interaction for cardiac function assessment and surgical design optimization. Progress in Pediatric Cardiology, 2010, 30, 51-62.	0.2	56
21	Wall stress and strain analysis using a three-dimensional thick-wall model with fluidâ€“structure interactions for blood flow in carotid arteries with stenoses. Computers and Structures, 1999, 72, 341-356.	2.4	51
22	Patient-Specific MRI-Based 3D FSI RV/LV/Patch Models for Pulmonary Valve Replacement Surgery and Patch Optimization. Journal of Biomechanical Engineering, 2008, 130, 041010.	0.6	49
23	A numerical simulation of viscous flows in collapsible tubes with stenoses. Applied Numerical Mathematics, 2000, 32, 87-101.	1.2	38
24	Multi-physics MRI-based two-layer fluidâ€“structure interaction anisotropic models of human right and left ventricles with different patch materials: Cardiac function assessment and mechanical stress analysis. Computers and Structures, 2011, 89, 1059-1068.	2.4	38
25	Influence of model boundary conditions on blood flow patterns in a patient specific stenotic right coronary artery. BioMedical Engineering OnLine, 2015, 14, S6.	1.3	38
26	Generalized finite difference method for 3-D viscous flow in stenotic tubes with large wall deformation and collapse. Applied Numerical Mathematics, 2001, 38, 49-68.	1.2	37
27	Intraplaque hemorrhage is associated with higher structural stresses in human atherosclerotic plaques: an in vivo MRI-based 3d fluid-structure interaction study. BioMedical Engineering OnLine, 2010, 9, 86.	1.3	37
28	In vivo MRI-based 3D FSI RV/LV models for human right ventricle and patch design for potential computer-aided surgery optimization. Computers and Structures, 2007, 85, 988-997.	2.4	34
29	Quantify patient-specific coronary material property and its impact on stress/strain calculations using in vivo IVUS data and 3D FSI models: a pilot study. Biomechanics and Modeling in Mechanobiology, 2017, 16, 333-344.	1.4	33
30	In Vivo/Ex Vivo MRI-Based 3D Non-Newtonian FSI Models for Human Atherosclerotic Plaques Compared with Fluid/Wall-Only Models. CMES - Computer Modeling in Engineering and Sciences, 2007, 19, 233-246.	0.8	33
31	Patient-specific artery shrinkage and 3D zero-stress state in multi-component 3D FSI models for carotid atherosclerotic plaques based on in vivo MRI data. MCB Molecular and Cellular Biomechanics, 2009, 6, 121-34.	0.3	31
32	Quantitative assessment of coronary artery plaque vulnerability by high-resolution magnetic resonance imaging and computational biomechanics: A pilot study ex vivo. Magnetic Resonance in Medicine, 2005, 54, 1360-1368.	1.9	28
33	Cap inflammation leads to higher plaque cap strain and lower cap stress: An MRI-PET/CT-based FSI modeling approach. Journal of Biomechanics, 2017, 50, 121-129.	0.9	28
34	Morphological and Stress Vulnerability Indices for Human Coronary Plaques and Their Correlations with Cap Thickness and Lipid Percent: An IVUS-Based Fluid-Structure Interaction Multi-patient Study. PLoS Computational Biology, 2015, 11, e1004652.	1.5	28
35	Pattern formation of vascular smooth muscle cells subject to nonuniform fluid shear stress: mediation by gradient of cell density. American Journal of Physiology - Heart and Circulatory Physiology, 2003, 285, H1072-H1080.	1.5	27
36	Using In Vivo Cine and 3D Multi-Contrast MRI to Determine Human Atherosclerotic Carotid Artery Material Properties and Circumferential Shrinkage Rate and Their Impact on Stress/Strain Predictions. Journal of Biomechanical Engineering, 2012, 134, 011008.	0.6	27

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37	Mechanical stress is associated with right ventricular response to pulmonary valve replacement in patients with repaired tetralogy of Fallot. Journal of Thoracic and Cardiovascular Surgery, 2016, 151, 687-694.e3.	0.4	27
38	Combining IVUS and Optical Coherence Tomography for More Accurate Coronary Cap Thickness Quantification and Stress/Strain Calculations: A Patient-Specific Three-Dimensional Fluid-Structure Interaction Modeling Approach. Journal of Biomechanical Engineering, 2018, 140, .	0.6	26
39	Quantifying Effect of Intraplaque Hemorrhage on Critical Plaque Wall Stress in Human Atherosclerotic Plaques Using Three-Dimensional Fluid-Structure Interaction Models. Journal of Biomechanical Engineering, 2012, 134, 121004.	0.6	24
40	Patient-Specific MRI-Based Right Ventricle Models Using Different Zero-Load Diastole and Systole Geometries for Better Cardiac Stress and Strain Calculations and Pulmonary Valve Replacement Surgical Outcome Predictions. PLoS ONE, 2016, 11, e0162986.	1.1	23
41	Pattern formation of vascular smooth muscle cells subject to nonuniform fluid shear stress: role of PDGF-Î² receptor and Src. American Journal of Physiology - Heart and Circulatory Physiology, 2003, 285, H1081-H1090.	1.5	22
42	Human coronary plaque wall thickness correlated positively with flow shear stress and negatively with plaque wall stress: an IVUS-based fluid-structure interaction multi-patient study. BioMedical Engineering OnLine, 2014, 13, 32.	1.3	21
43	Influence of non-Newtonian properties of blood on the wall shear stress in human atherosclerotic right coronary arteries. MCB Molecular and Cellular Biomechanics, 2011, 8, 73-90.	0.3	21
44	3D MRI-based multicomponent thin layer structure only plaque models for atherosclerotic plaques. Journal of Biomechanics, 2016, 49, 2726-2733.	0.9	20
45	Characterization of distensibility, plaque burden, and composition of the atherosclerotic carotid artery using magnetic resonance imaging. Medical Physics, 2012, 39, 6247-6253.	1.6	19
46	Fluid-structure interaction models based on patient-specific IVUS at baseline and follow-up for prediction of coronary plaque progression by morphological and biomechanical factors: A preliminary study. Journal of Biomechanics, 2018, 68, 43-50.	0.9	19
47	IVUS-Based FSI Models for Human Coronary Plaque Progression Study: Components, Correlation and Predictive Analysis. Annals of Biomedical Engineering, 2015, 43, 107-121.	1.3	18
48	Stiffness Properties of Adventitia, Media, and Full Thickness Human Atherosclerotic Carotid Arteries in the Axial and Circumferential Directions. Journal of Biomechanical Engineering, 2017, 139, .	0.6	17
49	Correlations between carotid plaque progression and mechanical stresses change sign over time: a patient follow up study using MRI and 3D FSI models. BioMedical Engineering OnLine, 2013, 12, 105.	1.3	16
50	Numerical simulation study on systolic anterior motion of the mitral valve in hypertrophic obstructive cardiomyopathy. International Journal of Cardiology, 2018, 266, 167-173.	0.8	15
51	A Machine Learning-Based Method for Intracoronary OCT Segmentation and Vulnerable Coronary Plaque Cap Thickness Quantification. International Journal of Computational Methods, 2019, 16, 1842008.	0.8	15
52	In Vivo Serial MRI-Based Models and Statistical Methods to Quantify Sensitivity and Specificity of Mechanical Predictors for Carotid Plaque Rupture: Location and Beyond. Journal of Biomechanical Engineering, 2011, 133, 064503.	0.6	14
53	Higher critical plaque wall stress in patients who died of coronary artery disease compared with those who died of other causes: A 3D FSI study based on ex vivo MRI of coronary plaques. Journal of Biomechanics, 2014, 47, 432-437.	0.9	14
54	A multi-physics growth model with fluidâ€“structure interactions for blood flow and re-stenosis in rat vein grafts. Computers and Structures, 2003, 81, 1041-1058.	2.4	13

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55	A multiphysics modeling approach to develop right ventricle pulmonary valve replacement surgical procedures with a contracting band to improve ventricle ejection fraction. Computers and Structures, 2013, 122, 78-87.	2.4	13
56	Numerical and Asymptotic Solutions for Peristaltic Motion of Nonlinear Viscous Flows with Elastic Free Boundaries. SIAM Journal of Scientific Computing, 1993, 14, 1300-1319.	1.3	11
57	Infarcted Left Ventricles Have Stiffer Material Properties and Lower Stiffness Variation: Three-Dimensional Echo-Based Modeling to Quantify In Vivo Ventricle Material Properties. Journal of Biomechanical Engineering, 2015, 137, 081005.	0.6	11
58	Patient-specific in vivo right ventricle material parameter estimation for patients with tetralogy of Fallot using MRI-based models with different zero-load diastole and systole morphologies. International Journal of Cardiology, 2019, 276, 93-99.	0.8	11
59	Using Optical Coherence Tomography and Intravascular Ultrasound Imaging to Quantify Coronary Plaque Cap Stress/Strain and Progression: A Follow-Up Study Using 3D Thin-Layer Models. Frontiers in Bioengineering and Biotechnology, 2021, 9, 713525.	2.0	11
60	3D Computational Mechanical Analysis for Human Atherosclerotic Plaques Using MRI-Based Models with Fluid-Structure Interactions. Lecture Notes in Computer Science, 2004, , 328-336.	1.0	11
61	Cyclic Bending Contributes to High Stress in a Human Coronary Atherosclerotic Plaque and Rupture Risk: In Vitro Experimental Modeling and Ex Vivo MRI-Based Computational Modeling Approach. MCB Molecular and Cellular Biomechanics, 2008, 5, 259-274.	0.3	11
62	Computer simulations of atherosclerotic plaque growth in coronary arteries. MCB Molecular and Cellular Biomechanics, 2010, 7, 193-202.	0.3	11
63	Steady viscous flow in constricted elastic tubes subjected to a uniform external pressure. International Journal for Numerical Methods in Engineering, 1998, 41, 1391-1415.	1.5	10
64	Using contracting band to improve right ventricle ejection fraction for patients with repaired tetralogy of Fallot: A modeling study using patient-specific CMR-based 2-layer anisotropic models of human right and left ventricles. Journal of Thoracic and Cardiovascular Surgery, 2013, 145, 285-293.e2.	0.4	10
65	A Multimodality Image-Based Fluidâ€“Structure Interaction Modeling Approach for Prediction of Coronary Plaque Progression Using IVUS and Optical Coherence Tomography Data With Follow-Up. Journal of Biomechanical Engineering, 2019, 141, .	0.6	10
66	Using optical coherence tomography and intravascular ultrasound imaging to quantify coronary plaque cap thickness and vulnerability: a pilot study. BioMedical Engineering OnLine, 2020, 19, 90.	1.3	10
67	Predicting plaque vulnerability change using intravascular ultrasoundâ€‰+â€‰optical coherence tomography image-based fluidâ€“structure interaction models and machine learning methods with patient follow-up data: a feasibility study. BioMedical Engineering OnLine, 2021, 20, 34.	1.3	10
68	Right ventricular local longitudinal curvature as a marker and predictor for pulmonary valve replacement surgery outcome: An initial study based on preoperative and postoperative cardiac magnetic resonance data from patients with repaired tetralogy of Fallot. Journal of Thoracic and Cardiovascular Surgery, 2014, 147, 537-538.	0.4	9
69	Material stiffness parameters as potential predictors of presence of left ventricle myocardial infarction: 3D echo-based computational modeling study. BioMedical Engineering OnLine, 2016, 15, 34.	1.3	9
70	Multi-factor decision-making strategy for better coronary plaque burden increase prediction: a patient-specific 3D FSI study using IVUS follow-up data. Biomechanics and Modeling in Mechanobiology, 2019, 18, 1269-1280.	1.4	9
71	MRI-based patient-specific human carotid atherosclerotic vessel material property variations in patients, vessel location and long-term follow up. PLoS ONE, 2017, 12, e0180829.	1.1	9
72	Peristaltic transport of a heat-conducting fluid subject to Newton's cooling law at the boundary. International Journal of Engineering Science, 1989, 27, 809-825.	2.7	8

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73	MRI-based biomechanical imaging: initial study on early plaque progression and vessel remodeling. Magnetic Resonance Imaging, 2009, 27, 1309-1318.	1.0	8
74	Flow and Deformation in a Multi-Component Arterial Stenosis Model. Journal of Biomechanical Science and Engineering, 2011, 6, 79-88.	0.1	8
75	Image-Based Modeling and Precision Medicine: Patient-Specific Carotid and Coronary Plaque Assessment and Predictions. IEEE Transactions on Biomedical Engineering, 2013, 60, 643-651.	2.5	8
76	Effects of Residual Stress, Axial Stretch, and Circumferential Shrinkage on Coronary Plaque Stress and Strain Calculations: A Modeling Study Using IVUS-Based Near-Idealized Geometries. Journal of Biomechanical Engineering, 2017, 139, .	0.6	8
77	Combining morphological and biomechanical factors for optimal carotid plaque progression prediction: An MRI-based follow-up study using 3D thin-layer models. International Journal of Cardiology, 2019, 293, 266-271.	0.8	8
78	Using intravascular ultrasound image-based fluid-structure interaction models and machine learning methods to predict human coronary plaque vulnerability change. Computer Methods in Biomechanics and Biomedical Engineering, 2020, 23, 1267-1276.	0.9	8
79	Machine Learning Model Comparison for Automatic Segmentation of Intracoronary Optical Coherence Tomography and Plaque Cap Thickness Quantification. CMES - Computer Modeling in Engineering and Sciences, 2020, 123, 631-646.	0.8	8
80	Optical Coherence Tomography-Derived Changes in Plaque Structural Stress Over the Cardiac Cycle: A New Method for Plaque Biomechanical Assessment. Frontiers in Cardiovascular Medicine, 2021, 8, 715995.	1.1	8
81	Meshless Generalized Finite Difference Method and Human Carotid Atherosclerotic Plaque Progression Simulation Using Multi-Year MRI Patient-Tracking Data. CMES - Computer Modeling in Engineering and Sciences, 2008, 28, 95-107.	0.8	8
82	Two-layer passive/active anisotropic FSI models with fiber orientation: MRI-based patient-specific modeling of right ventricular response to pulmonary valve insertion surgery. MCB Molecular and Cellular Biomechanics, 2007, 4, 159-76.	0.3	8
83	Influence of Distal Stenosis on Blood Flow Through Coronary Serial Stenoses: A Numerical Study. International Journal of Computational Methods, 2019, 16, 1842003.	0.8	7
84	Convolution Neural Networks and Support Vector Machines for Automatic Segmentation of Intracoronary Optical Coherence Tomography. MCB Molecular and Cellular Biomechanics, 2019, 16, 153-161.	0.3	7
85	A Free Moving Boundary Model and Boundary Iteration Method for Unsteady Viscous Flow in Stenotic Elastic Tubes. SIAM Journal of Scientific Computing, 1999, 21, 1370-1386.	1.3	6
86	Impact of flow rates in a cardiac cycle on correlations between advanced human carotid plaque progression and mechanical flow shear stress and plaque wall stress. BioMedical Engineering OnLine, 2011, 10, 61.	1.3	6
87	A prediction tool for plaque progression based on patient-specific multi-physical modeling. PLoS Computational Biology, 2021, 17, e1008344.	1.5	6
88	Comparisons of simulation results between passive and active fluid structure interaction models for left ventricle in hypertrophic obstructive cardiomyopathy. BioMedical Engineering OnLine, 2021, 20, 9.	1.3	6
89	Three-Dimensional Carotid Plaque Progression Simulation Using Meshless Generalized Finite Difference Method Based on Multi-Year MRI Patient-Tracking Data. CMES - Computer Modeling in Engineering and Sciences, 2010, 57, 51-76.	0.8	6
90	Image-based biomechanical modeling for coronary atherosclerotic plaque progression and vulnerability prediction. International Journal of Cardiology, 2022, 352, 1-8.	0.8	6

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91	Experiment-based numerical simulation of unsteady viscous flow in stenotic collapsible tubes. Applied Numerical Mathematics, 2001, 36, 299-320.	1.2	5
92	Cardiovascular diseases and vulnerable plaques: data, modeling, predictions and clinical applications. BioMedical Engineering OnLine, 2015, 14, S1.	1.3	5
93	Peristaltic Transport of a heat-conducting viscous fluid as an application of abstract differential equations and semigroup of operators. Journal of Mathematical Analysis and Applications, 1992, 169, 391-407.	0.5	4
94	Using 2D in Vivo Ivus-based Models for Human Coronary Plaque Progression Analysis and Comparison with 3d Fsi Models. Procedia Engineering, 2015, 126, 451-455.	1.2	4
95	Patient-specific CT-based 3D passive FSI model for left ventricle in hypertrophic obstructive cardiomyopathy. Computer Methods in Biomechanics and Biomedical Engineering, 2018, 21, 255-263.	0.9	4
96	Ventricle stress/strain comparisons between Tetralogy of Fallot patients and healthy using models with different zero-load diastole and systole morphologies. PLoS ONE, 2019, 14, e0220328.	1.1	4
97	Multi-patient study for coronary vulnerable plaque model comparisons: 2D/3D and fluidâ€“structure interaction simulations. Biomechanics and Modeling in Mechanobiology, 2021, 20, 1383-1397.	1.4	4
98	A Novel Pulmonary Valve Replacement Surgery Strategy Using Contracting Band for Patients With Repaired Tetralogy of Fallot: An MRI-Based Multipatient Modeling Study. Frontiers in Bioengineering and Biotechnology, 2021, 9, 638934.	2.0	4
99	Comparison of Right Ventricle Morphological and Mechanical Characteristics for Healthy and Patients with Tetralogy of Fallot: An In Vivo MRI-Based Modeling Study. MCB Molecular and Cellular Biomechanics, 2017, 14, 137-151.	0.3	4
100	Quantifying Patient-Specific in vivo Coronary Plaque Material Properties for Accurate Stress/Strain Calculations: An IVUS-Based Multi-Patient Study. Frontiers in Physiology, 2021, 12, 721195.	1.3	4
101	Effect of Patch Mechanical Properties on Right Ventricle Function Using MRI-Based Two-Layer Anisotropic Models of Human Right and Left Ventricles. CMES - Computer Modeling in Engineering and Sciences, 2010, 56, 113-130.	0.8	4
102	3D Echo-Based Patient-Specific Computational Left Ventricle Models to Quantify Material Properties and Stress/Strain Differences between Ventricles with and without Infarct. CMES - Computer Modeling in Engineering and Sciences, 2014, 99, 491-508.	0.8	4
103	Diastolic Predominant Flow in Compliant Coronary Stenosis Model. Journal of Biomechanical Science and Engineering, 2010, 5, 303-313.	0.1	3
104	In Vivo Intravascular Ultrasound-Based 3D Thin-Walled Model for Human Coronary Plaque Progression Study: Transforming Research to Potential Commercialization. International Journal of Computational Methods, 2019, 16, 1842011.	0.8	3
105	Multi-Band Surgery for Repaired Tetralogy of Fallot Patients With Reduced Right Ventricle Ejection Fraction: A Pilot Study. Frontiers in Physiology, 2020, 11, 198.	1.3	3
106	Porcine and bovine aortic valve comparison for surgical optimization: A fluid-structure interaction modeling study. International Journal of Cardiology, 2021, 334, 88-95.	0.8	3
107	Computational Modeling of Human Bicuspid Pulmonary Valve Dynamic Deformation in Patients with Tetralogy of Fallot. CMES - Computer Modeling in Engineering and Sciences, 2019, 119, 227-244.	0.8	3
108	IVUS-based computational modeling and planar biaxial artery material properties for human coronary plaque vulnerability assessment. MCB Molecular and Cellular Biomechanics, 2012, 9, 77-93.	0.3	3

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109	Mechanical image analysis using finite element method. , 2006, , 324-340.		2
110	3D In Vivo IVUS-Based Anisotropic FSI Models With Cyclic Bending for Human Coronary Atherosclerotic Plaque Mechanical Analysis. , 2009, , .		2
111	Using 3D Echo-based Modeling to Quantify in Vivo Ventricle Material Properties: A Multi-patient Study. Procedia Engineering, 2015, 126, 446-450.	1.2	2
112	A Fast-Fractional Flow Reserve Simulation Method in A Patient with Coronary Stenosis Based on Resistance Boundary Conditions. CMES - Computer Modeling in Engineering and Sciences, 2018, 116, 163-173.	0.8	2
113	Patient-Specific Echo-Based Left Ventricle Models for Active Contraction and Relaxation Using Different Zero-Load Diastole and Systole Geometries. International Journal of Computational Methods, 2019, 16, 1842014.	0.8	2
114	Impact of Patient-Specific In Vivo Vessel Material Properties on Carotid Atherosclerotic Plaque Stress/Strain Calculations. International Journal of Computational Methods, 2019, 16, 1842002.	0.8	2
115	Optical Coherence Tomography-Based Patient-Specific Residual Multi-Thrombus Coronary Plaque Models With Fluidâ€"Structure Interaction for Better Treatment Decisions: A Biomechanical Modeling Case Study. Journal of Biomechanical Engineering, 2021, 143, .	0.6	2
116	Influences of Flow Parameters on Pressure Drop in a Patient Specific Right Coronary Artery with Two Stenoses. Lecture Notes in Computer Science, 2017, , 56-70.	1.0	2
117	Patient-Specific Carotid Plaque Progression Simulation Using 3D Meshless Generalized Finite Difference Models with Fluid-Structure Interactions Based on Serial In Vivo MRI Data. CMES - Computer Modeling in Engineering and Sciences, 2011, 72, 53-77.	0.8	2
118	Modeling Active Contraction and Relaxation of Left Ventricle Using Different Zero-load Diastole and Systole Geometries for Better Material Parameter Estimation and Stress/Strain Calculations. MCB Molecular and Cellular Biomechanics, 2016, 13, 33-55.	0.3	2
119	Quantifying Vessel Material Properties Using MRI Under Pressure Condition and MRI-Based FSI Mechanical Analysis for Human Atherosclerotic Plaques. , 2006, , 523.		1
120	Influences of External Pressure on Flow and Deformation in Arterial Stenosis Model. Journal of Biomechanical Science and Engineering, 2008, 3, 75-84.	0.1	1
121	FSI Modeling Approach to Develop Right Ventricle Pulmonary Valve Replacement Surgical Procedures with a Contracting Actuator and Improve Ventricle Ejection Fraction. Procedia Engineering, 2015, 126, 441-445.	1.2	1
122	IVUS-based Fluid-structure Interaction Models for Novel Plaque Vulnerability Indices: A Study in Patients with Coronary Artery Disease. Procedia Engineering, 2015, 126, 436-440.	1.2	1
123	Stress-Based Plaque Vulnerability Index and Assessment for Carotid Atherosclerotic Plaques Using Patient-Specific Vessel Material Properties. MCB Molecular and Cellular Biomechanics, 2018, 15, 189-201.	0.3	1
124	Angle of Attack between Blood Flow and Mitral Valve Leaflets in Hypertrophic Obstructive Cardiomyopathy: An In Vivo Multi-patient CT-based FSI Study. CMES - Computer Modeling in Engineering and Sciences, 2018, 116, 115-125.	0.8	1
125	Comparisons of Patient-specific Active and Passive Models for Left Ventricle in Hypertrophic Obstructive Cardiomyopathy. MCB Molecular and Cellular Biomechanics, 2019, 16, 58-58.	0.3	1
126	Optimization of Left Ventricle Pace Maker Location Using Echo-Based Fluid-Structure Interaction Models. Frontiers in Physiology, 2022, 13, 843421.	1.3	1

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127	Predicting Coronary Stenosis Progression Using Plaque Fatigue From IVUS-Based Thin-Slice Models: A Machine Learning Random Forest Approach. Frontiers in Physiology, 2022, 13, .	1.3	1
128	Predicting Human Carotid Plaque Site of Rupture Using 3D Critical Plaque Wall Stress and Flow Shear Stress: A 3D Multi-Patient FSI Study Based on In Vivo MRI of Plaques With and Without Prior Rupture. , 2010, , .		0
129	Determination of Human Carotid Atherosclerotic Plaque Material Properties Non-Invasively Using In Vivo Cine and 3D Magnetic Resonance Imaging and Image-Based Modeling Techniques. , 2011, , .		0
130	3D Computational Fluid-Structure Interaction Model of Canine Heart With Different Patch Materials for Optimal Myocardium Regeneration. , 2013, , .		0
131	Correction: correlations between carotid plaque progression and mechanical stresses change sign over time: a patient follow up study using MRI and 3D FSI models. BioMedical Engineering OnLine, 2013, 12, 126.	1.3	0
132	Sudden Death in Coronary Artery Disease are Associated With High 3D Critical Plaque Wall Stress: A 3D Multi-Patient FSI Study Based on Ex Vivo MRI of Coronary Plaques. , 2013, , .		0
133	Preface: Computational and experimental methods for biological research: cardiovascular diseases and beyond. BioMedical Engineering OnLine, 2016, 15, 157.	1.3	0
134	Preface â€" Computational Modeling for Cardiovascular Disease and Biological Applications. International Journal of Computational Methods, 2019, 16, 1802002.	0.8	0
135	Prediction of the coronary plaque growth and vulnerability change by using patient-specific 3D fluidâ€"structure interaction models based on intravascular ultrasound and optical coherence tomography follow-up data. , 2021, , 315-333.		0
136	Bioprosthetic Valve Size Selection to Optimize Aortic Valve Replacement Surgical Outcome: A Fluid-Structure Interaction Modeling Study. CMES - Computer Modeling in Engineering and Sciences, 2021, 127, 159-174.	0.8	0
137	A 3-D model with fluid-structure interactions for unsteady blood flow in stenotic arteries with cyclic wall collapse. , 2001, , 1388-1392.		0
138	Computational Biomechanical Right Ventricle Modeling with Contracting Bands to Improve Ventricle Cardiac Function for Patient with Repaired Tetralogy of Fallot. MCB Molecular and Cellular Biomechanics, 2019, 16, 56-57.	0.3	0
139	Image-Based Modeling for Atherosclerotic Coronary Plaque Progression and Vulnerability Research. MCB Molecular and Cellular Biomechanics, 2019, 16, 27-28.	0.3	0
140	Mass Transport of LDL in Stenotic Right Coronary Arteries. MCB Molecular and Cellular Biomechanics, 2019, 16, 25-26.	0.3	0
141	Predicting Plaque Progression Using Patient-Specific Fluid-Structure-Interaction Models Based on IVUS and OCT Images with Follow-Up. MCB Molecular and Cellular Biomechanics, 2019, 16, 75-76.	0.3	0
142	Using 3D Thin-Layer Model with in Vivo Patient-Specific Vessel Material Properties to Assesse Carotid Atherosclerotic Plaque Vulnerability. MCB Molecular and Cellular Biomechanics, 2019, 16, 81-82.	0.3	0
143	Computational Modeling of Human Bicuspid Pulmonary Valve Dynamic Deformation in Patients with Tetralogy of Fallot. MCB Molecular and Cellular Biomechanics, 2019, 16, 59-59.	0.3	0