

Frans N Van De Vosse

List of Publications by Year in descending order

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Version: 2024-02-01

236
papers

6,726
citations

87888

38
h-index

79698

73
g-index

242
all docs

242
docs citations

242
times ranked

7349
citing authors

#	ARTICLE	IF	CITATIONS
1	Scale-Resolving Simulations of Steady and Pulsatile Flow Through Healthy and Stenotic Heart Valves. <i>Journal of Biomechanical Engineering</i> , 2022, 144, .	1.3	1
2	Continuum modeling of thrombus formation and growth under different shear rates. <i>Journal of Biomechanics</i> , 2022, 132, 110915.	2.1	7
3	A strategy to personalize a 1D pulse wave propagation model for estimating subject-specific central aortic pressure waveform. <i>Computers in Biology and Medicine</i> , 2022, 146, 105528.	7.0	4
4	A Spatial Near-Field Clutter Reduction Filter Preserving Tissue Speckle in Echocardiography. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2021, 68, 979-992.	3.0	6
5	Multiscale modeling of a modified <i>Blalock-Taussig</i> surgery in a patient-specific tetralogy of Fallot. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2021, 37, e3436.	2.1	2
6	The Feasibility of Dynamic Musculoskeletal Function Analysis of the Vastus Lateralis in Endurance Runners Using Continuous, Hands-Free Ultrasound. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 1534.	2.5	5
7	Enhancing Lateral Contrast Using Multi-perspective Ultrasound Imaging of Abdominal Aortas. <i>Ultrasound in Medicine and Biology</i> , 2021, 47, 535-545.	1.5	14
8	Model-based aortic power transfer: A potential measure for quantifying aortic stenosis severity based on measured data. <i>Medical Engineering and Physics</i> , 2021, 90, 66-81.	1.7	1
9	Mechanical characterization of abdominal aortas using multi-perspective ultrasound imaging. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 119, 104509.	3.1	6
10	Ultrasound-Based Fluid-Structure Interaction Modeling of Abdominal Aortic Aneurysms Incorporating Pre-stress. <i>Frontiers in Physiology</i> , 2021, 12, 717593.	2.8	8
11	A Generalized Approach for Automatic 3-D Geometry Assessment of Blood Vessels in Transverse Ultrasound Images Using Convolutional Neural Networks. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2021, 68, 3326-3335.	3.0	9
12	SVD-based filtering to detect intraplaque hemorrhage using single wavelength photoacoustic imaging. <i>Journal of Biomedical Optics</i> , 2021, 26, .	2.6	2
13	Interprofessional Consensus Regarding Design Requirements for Liquid-Based Perinatal Life Support (PLS) Technology. <i>Frontiers in Pediatrics</i> , 2021, 9, 793531.	1.9	10
14	The Role of One-Dimensional Model-Generated Inter-Subject Variations in Systemic Properties on Wall Shear Stress Indices of Intracranial Aneurysms. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 1030-1039.	4.2	0
15	Ultrasound Based Wall Stress Analysis of Abdominal Aortic Aneurysms using Multiperspective Imaging. <i>European Journal of Vascular and Endovascular Surgery</i> , 2020, 59, 81-91.	1.5	13
16	Image acquisition stability of fixated musculoskeletal sonography in an exercise setting: a quantitative analysis and comparison with freehand acquisition. <i>Journal of Medical Ultrasonics (2001)</i> , 2020, 47, 47-56.	1.3	5
17	Reproducibility assessment of ultrasound-based aortic stiffness quantification and verification using Bi-axial tensile testing. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 103, 103571.	3.1	8
18	Automated 3D geometry segmentation of the healthy and diseased carotid artery in freehand, probe tracked ultrasound images. <i>Medical Physics</i> , 2020, 47, 1034-1047.	3.0	21

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19	Multiperspective Ultrasound Strain Imaging of the Abdominal Aorta. IEEE Transactions on Medical Imaging, 2020, 39, 3714-3724.	8.9	24
20	Uncertainty in model-based treatment decision support: Applied to aortic valve stenosis. International Journal for Numerical Methods in Biomedical Engineering, 2020, 36, e3388.	2.1	6
21	An R-Space Theorem for Plane Wave Ultrasound Reconstruction. , 2020, , .		4
22	Recovery Responses of Central Hemodynamics in Basketball Athletes and Controls After the Bruce Test. Frontiers in Physiology, 2020, 11, 593277.	2.8	1
23	A demonstration of high field-of-view stability in hands-free echocardiography. Cardiovascular Ultrasound, 2020, 18, 18.	1.6	2
24	3D-printed stenotic aortic valve model to simulate physiology before, during, and after transcatheter aortic valve implantation. International Journal of Cardiology, 2020, 313, 32-34.	1.7	5
25	Quantification of the temperature gradient through a catheter in continuous infusion thermodilution for coronary flow measurements. Physiological Measurement, 2020, 41, 075006.	2.1	0
26	A novel technique for the assessment of mechanical properties of vascular tissue. Biomechanics and Modeling in Mechanobiology, 2020, 19, 1585-1594.	2.8	4
27	Ultrasound-based estimation of remaining cardiac function in LVAD-supported ex vivo hearts. Artificial Organs, 2020, 44, E326-E336.	1.9	3
28	Cardiovascular models for personalised medicine: Where now and where next?. Medical Engineering and Physics, 2019, 72, 38-48.	1.7	42
29	Including surrounding tissue improves ultrasound-based 3D mechanical characterization of abdominal aortic aneurysms. Journal of Biomechanics, 2019, 85, 126-133.	2.1	14
30	Echocardiographic Assessment of Left Bundle Branch-Related Strain Dyssynchrony: A Comparison With Tagged MRI. Ultrasound in Medicine and Biology, 2019, 45, 2063-2074.	1.5	8
31	A predictive computational model to estimate myocardial temperature during intracoronary hypothermia in acute myocardial infarction. Medical Engineering and Physics, 2019, 68, 65-75.	1.7	5
32	A mathematical model to investigate the effects of intravenous fluid administration and fluid loss. Journal of Biomechanics, 2019, 88, 4-11.	2.1	2
33	The influence of model order reduction on the computed fractional flow reserve using parameterized coronary geometries. Journal of Biomechanics, 2019, 82, 313-323.	2.1	14
34	A comparative study of geometry-based methods and intra-arterial pressure measurements to assess the hemodynamic significance of equivocal iliac artery stenoses. Vascular, 2019, 27, 119-127.	0.9	1
35	Quantification of aortic stiffness and wall stress in healthy volunteers and abdominal aortic aneurysm patients using time-resolved 3D ultrasound: a comparison study. European Heart Journal Cardiovascular Imaging, 2019, 20, 185-191.	1.2	35
36	Intraplaque haemorrhage detection using single-wavelength PAI and singular value decomposition in the carotid artery. , 2019, , .		0

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37	A Novel Angiographic Quantification of Aortic Regurgitation After TAVR Provides an Accurate Estimation of Regurgitation Fraction Derived From Cardiac Magnetic Resonance Imaging. <i>JACC: Cardiovascular Interventions</i> , 2018, 11, 287-297.	2.9	37
38	Perfusion dynamics assessment with Power Doppler ultrasound in skeletal muscle during maximal and submaximal cycling exercise. <i>European Journal of Applied Physiology</i> , 2018, 118, 1209-1219.	2.5	1
39	Investigation on the Effect of Spatial Compounding on Photoacoustic Images of Carotid Plaques in the <i>In Vivo</i> Available Rotational Range. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2018, 65, 440-447.	3.0	7
40	Modeling regulation of vascular tone following muscle contraction: Model development, validation and global sensitivity analysis. <i>Journal of Computational Science</i> , 2018, 24, 143-159.	2.9	4
41	Segmentation of the left ventricle in cardiac MRI using a hierarchical extreme learning machine model. <i>International Journal of Machine Learning and Cybernetics</i> , 2018, 9, 1741-1751.	3.6	16
42	What is needed to make cardiovascular models suitable for clinical decision support? A viewpoint paper. <i>Journal of Computational Science</i> , 2018, 24, 68-84.	2.9	39
43	Zero-dimensional lumped approach to incorporate the dynamic part of the pressure at vessel junctions in a 1D wave propagation model. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2018, 34, e3116.	2.1	1
44	Effects of exercise modalities on central hemodynamics, arterial stiffness and cardiac function in cardiovascular disease: Systematic review and meta-analysis of randomized controlled trials. <i>PLoS ONE</i> , 2018, 13, e0200829.	2.5	46
45	Videodensitometric quantification of paravalvular regurgitation of a transcatheter aortic valve: in vitro validation. <i>EuroIntervention</i> , 2018, 13, 1527-1535.	3.2	21
46	Visualization of vasculature using a hand-held photoacoustic probe: phantom and <i>in vivo</i> validation. <i>Journal of Biomedical Optics</i> , 2017, 22, 041013.	2.6	10
47	Simulation of fetal heart rate variability with a mathematical model. <i>Medical Engineering and Physics</i> , 2017, 42, 55-64.	1.7	2
48	Buffers Strongly Modulate Fibrin Self-Assembly into Fibrous Networks. <i>Langmuir</i> , 2017, 33, 6342-6352.	3.5	45
49	Ultrasound functional imaging in an <i>ex vivo</i> beating porcine heart platform. <i>Physics in Medicine and Biology</i> , 2017, 62, 9112-9126.	3.0	7
50	How to define the hemodynamic significance of an equivocal iliofemoral artery stenosis: Review of literature and outcomes of an international questionnaire. <i>Vascular</i> , 2017, 25, 598-608.	0.9	9
51	Diastolic Augmentation Index Improves Radial Augmentation Index in Assessing Arterial Stiffness. <i>Scientific Reports</i> , 2017, 7, 5864.	3.3	19
52	In Vivo Validation of Patient-Specific Pressure Gradient Calculations for Iliac Artery Stenosis Severity Assessment. <i>Journal of the American Heart Association</i> , 2017, 6, .	3.7	7
53	Notice of Removal: Hemorrhages detection in atherosclerotic plaques using ultrasound and photoacoustic, phantom study. , 2017, , .		0
54	Notice of Removal: Characterization of human carotid plaques using multi-wavelength photoacoustic imaging. , 2017, , .		1

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55	Hemodynamic significance assessment of equivocal iliac artery stenoses by comparing duplex ultrasonography with intra-arterial pressure measurements. <i>Journal of Cardiovascular Surgery</i> , 2017, 59, 37-44.	0.6	3
56	Notice of Removal: In-vivo mechanical characterization of abdominal aortic aneurysms and healthy aortas using 4D ultrasound: A comparison study. , 2017, , .		0
57	A novel synchronised diastolic injection method to reduce contrast volume during aortography for aortic regurgitation assessment: in vitro experiment of a transcatheter heart valve model. <i>EuroIntervention</i> , 2017, 13, 1288-1295.	3.2	14
58	Intracoronary hypothermia for acute myocardial infarction in the isolated beating pig heart. <i>American Journal of Translational Research (discontinued)</i> , 2017, 9, 558-568.	0.0	10
59	Enhancement of Arterial Pressure Pulsatility by Controlling Continuous-Flow Left Ventricular Assist Device Flow Rate in Mock Circulatory System. <i>Journal of Medical and Biological Engineering</i> , 2016, 36, 308-315.	1.8	20
60	Application of an Adaptive Polynomial Chaos Expansion on Computationally Expensive Three-Dimensional Cardiovascular Models for Uncertainty Quantification and Sensitivity Analysis. <i>Journal of Biomechanical Engineering</i> , 2016, 138, .	1.3	26
61	Automatic segmentation and registration of abdominal aortic aneurysms using 3D ultrasound. , 2016, , .		1
62	Arterial pulsatility under phasic left ventricular assist device support. <i>Bio-Medical Materials and Engineering</i> , 2016, 27, 451-460.	0.6	4
63	Toward the detection of intraplaque hemorrhage in carotid artery lesions using photoacoustic imaging. <i>Journal of Biomedical Optics</i> , 2016, 22, 041010.	2.6	26
64	Patient Specific Wall Stress Analysis and Mechanical Characterization of Abdominal Aortic Aneurysms Using 4D Ultrasound. <i>European Journal of Vascular and Endovascular Surgery</i> , 2016, 52, 635-642.	1.5	44
65	Global sensitivity analysis of a model for venous valve dynamics. <i>Journal of Biomechanics</i> , 2016, 49, 2845-2853.	2.1	5
66	Influence of limited field-of-view on wall stress analysis in abdominal aortic aneurysms. <i>Journal of Biomechanics</i> , 2016, 49, 2405-2412.	2.1	16
67	A constitutive model for developing blood clots with various compositions and their nonlinear viscoelastic behavior. <i>Biomechanics and Modeling in Mechanobiology</i> , 2016, 15, 279-291.	2.8	39
68	A mathematical model to simulate the cardiotocogram during labor. Part A: Model setup and simulation of late decelerations. <i>Journal of Biomechanics</i> , 2016, 49, 2466-2473.	2.1	5
69	A mathematical model to simulate the cardiotocogram during labor. Part B: Parameter estimation and simulation of variable decelerations. <i>Journal of Biomechanics</i> , 2016, 49, 2474-2480.	2.1	5
70	In vitro assessment of mitral valve function in cyclically pressurized porcine hearts. <i>Medical Engineering and Physics</i> , 2016, 38, 346-353.	1.7	20
71	Assessment of mechanical properties of porcine aortas under physiological loading conditions using vascular elastography. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016, 59, 185-196.	3.1	17
72	Segmentation of the Left Ventricle in Cardiac MRI Using an ELM Model. <i>Proceedings in Adaptation, Learning and Optimization</i> , 2016, , 147-157.	1.6	0

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73	Inflation and Bi-Axial Tensile Testing of Healthy Porcine Carotid Arteries. <i>Ultrasound in Medicine and Biology</i> , 2016, 42, 574-585.	1.5	6
74	A 1D pulse wave propagation model of the hemodynamics of calf muscle pump function. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2015, 31, e02716.	2.1	21
75	Personalization of models with many model parameters: an efficient sensitivity analysis approach. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2015, 31, .	2.1	25
76	Intra-Aortic Balloon Pump Support in the Isolated Beating Porcine Heart in Nonischemic and Ischemic Pump Failure. <i>Artificial Organs</i> , 2015, 39, 931-938.	1.9	16
77	Estimation of Left Ventricular Pressure with the Pump as "Sensor" in Patients with a Continuous Flow LVAD. <i>International Journal of Artificial Organs</i> , 2015, 38, 433-443.	1.4	15
78	A novel passive left heart platform for device testing and research. <i>Medical Engineering and Physics</i> , 2015, 37, 361-366.	1.7	36
79	Semi-3D strain imaging in normal and LVAD supported ex vivo beating hearts. , 2015, , .		1
80	Photoacoustic perfusion measurements: a comparison with power Doppler in phantoms. <i>Proceedings of SPIE</i> , 2015, , .	0.8	0
81	Ex vivo photoacoustic imaging of atherosclerotic carotid plaques. , 2015, , .		4
82	Aortic Valve Function Under Support of a Left Ventricular Assist Device: Continuous vs. Dynamic Speed Support. <i>Annals of Biomedical Engineering</i> , 2015, 43, 1727-1737.	2.5	8
83	"Virtual"(Computed) Fractional Flow Reserve. <i>JACC: Cardiovascular Interventions</i> , 2015, 8, 1009-1017.	2.9	100
84	Optical absorbance measurements and photoacoustic evaluation of freeze-thawed polyvinyl-alcohol vessel phantoms. <i>Proceedings of SPIE</i> , 2015, , .	0.8	3
85	Feasibility of wall stress analysis of abdominal aortic aneurysms using three-dimensional ultrasound. <i>Journal of Vascular Surgery</i> , 2015, 61, 1175-1184.	1.1	21
86	A constitutive model for the time-dependent, nonlinear stress response of fibrin networks. <i>Biomechanics and Modeling in Mechanobiology</i> , 2015, 14, 995-1006.	2.8	15
87	An overlapping domain technique coupling spectral and finite elements for fluid"structure interaction. <i>Computers and Fluids</i> , 2015, 123, 235-245.	2.5	8
88	Fast and Accurate Pressure-Drop Prediction in Straightened Atherosclerotic Coronary Arteries. <i>Annals of Biomedical Engineering</i> , 2015, 43, 59-67.	2.5	12
89	Intra-aortic balloon counterpulsation reduces mortality in large anterior myocardial infarction complicated by persistent ischaemia: a CRISP-AMI substudy. <i>EuroIntervention</i> , 2015, 11, 286-292.	3.2	30
90	Improving Arterial Pulsatility by Feedback Control of a Continuous Flow Left Ventricular Assist Device via <i>in Silico</i> Modeling. <i>International Journal of Artificial Organs</i> , 2014, 37, 773-785.	1.4	19

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91	Wall stress analysis of abdominal aortic aneurysms using 3D ultrasound. , 2014, , .		0
92	A dedicated guided-search displacement algorithm for cardiovascular strain imaging. , 2014, , .		0
93	Applicability of the polynomial chaos expansion method for personalization of a cardiovascular pulse wave propagation model. International Journal for Numerical Methods in Biomedical Engineering, 2014, 30, 1679-1704.	2.1	29
94	Optical and acoustic characterization of freeze-thawed polyvinyl alcohol gels. , 2014, , .		5
95	Assessment of aortic valve pressure overload and leaflet functions in an ex vivo beating heart loaded with a continuous flow cardiac assist device. European Journal of Cardio-thoracic Surgery, 2014, 45, 377-383.	1.4	19
96	Design of a fatty plaque phantom for validation of strain imaging. , 2014, , .		1
97	In vitro elastography of porcine carotid arteries, a validation study. , 2014, , .		0
98	Towards mechanical characterization of intact endarterectomy samples of carotid arteries during inflation using Echo-CT. Journal of Biomechanics, 2014, 47, 805-814.	2.1	15
99	Echo-Computed Tomography Strain Imaging of Healthy and Diseased Carotid Specimens. Ultrasound in Medicine and Biology, 2014, 40, 1329-1342.	1.5	21
100	A continuum model for platelet plug formation and growth. International Journal for Numerical Methods in Biomedical Engineering, 2014, 30, 634-658.	2.1	20
101	A longitudinal feasibility study on AAA growth vs. ultrasound elastography. , 2014, , .		2
102	A microscale pulsatile flow device for dynamic cross-slot rheometry. Sensors and Actuators A: Physical, 2014, 220, 221-229.	4.1	5
103	A Constitutive Model for a Maturing Fibrin Network. Biophysical Journal, 2014, 107, 504-513.	0.5	21
104	A continuum model for platelet plug formation, growth and deformation. International Journal for Numerical Methods in Biomedical Engineering, 2014, 30, 1541-1557.	2.1	8
105	An in silico case study of idiopathic dilated cardiomyopathy via a multi-scale model of the cardiovascular system. Computers in Biology and Medicine, 2014, 53, 141-153.	7.0	5
106	Arterial pulsatility improvement in a feedback-controlled continuous flow left ventricular assist device: An ex-vivo experimental study. Medical Engineering and Physics, 2014, 36, 1288-1295.	1.7	19
107	A mock circulation model for cardiovascular device evaluation. Physiological Measurement, 2014, 35, 687-702.	2.1	31
108	Vascular Elastography: A Validation Study. Ultrasound in Medicine and Biology, 2014, 40, 1882-1895.	1.5	16

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109	A computational fluid dynamics study on hemodynamics for different locations of the distal anastomosis of a bypass nearby a collateral vessel in the femoropopliteal area. International Journal for Numerical Methods in Biomedical Engineering, 2014, 30, 1263-1277.	2.1	4
110	An overlapping domain technique coupling spectral and finite elements for fluid flow. Computers and Fluids, 2014, 100, 336-346.	2.5	6
111	Intra-aortic balloon counterpulsation in acute myocardial infarction: old and emerging indications. Netherlands Heart Journal, 2013, 21, 554-560.	0.8	11
112	A Novel Flexible Thermoelectric Sensor for Intravascular Flow Assessment. IEEE Sensors Journal, 2013, 13, 3883-3891.	4.7	8
113	A combination of thermal methods to assess coronary pressure and flow dynamics with a pressure-sensing guide wire. Medical Engineering and Physics, 2013, 35, 298-309.	1.7	3
114	A Novel Experimental Approach for Three-Dimensional Geometry Assessment of Calcified Human Stenotic Arteries in Vitro. Ultrasound in Medicine and Biology, 2013, 39, 1875-1886.	1.5	9
115	A sensitivity analysis of a personalized pulse wave propagation model for arteriovenous fistula surgery. Part B: Identification of possible generic model parameters. Medical Engineering and Physics, 2013, 35, 827-837.	1.7	14
116	A sensitivity analysis of a personalized pulse wave propagation model for arteriovenous fistula surgery. Part A: Identification of most influential model parameters. Medical Engineering and Physics, 2013, 35, 810-826.	1.7	27
117	Validation of a patient-specific hemodynamic computational model for surgical planning of vascular access in hemodialysis patients. Kidney International, 2013, 84, 1237-1245.	5.2	67
118	Modeling the Interaction Between the Intra-Aortic Balloon Pump and the Cardiovascular System. ASAIO Journal, 2013, 59, 30-36.	1.6	17
119	Pump Flow Estimation From Pressure Head and Power Uptake for the HeartAssist5, HeartMate II, and HeartWare VADs. ASAIO Journal, 2013, 59, 420-426.	1.6	40
120	Towards Patient-Specific Modeling of Coronary Hemodynamics in Healthy and Diseased State. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-15.	1.3	18
121	Autoregulation of Coronary Blood Flow in the Isolated Beating Pig Heart. Artificial Organs, 2013, 37, 724-730.	1.9	11
122	Non Contrast-Enhanced MRA versus Ultrasound Blood Vessel Assessment to determine the Choice of Hemodialysis Vascular Access. Journal of Vascular Access, 2013, 14, 348-355.	0.9	7
123	The Benefit of Non Contrast-Enhanced Magnetic Resonance Angiography for Predicting Vascular Access Surgery Outcome: A Computer Model Perspective. PLoS ONE, 2013, 8, e53615.	2.5	5
124	Geometrical and Morphological Assessment of Human Endarterectomy Specimens In Vitro. , 2013, , .		0
125	A Numerical Method of Reduced Complexity for Simulating Vascular Hemodynamics Using Coupled 0D Lumped and 1D Wave Propagation Models. Computational and Mathematical Methods in Medicine, 2012, 2012, 1-10.	1.3	33
126	Correlation-based discrimination between myocardial tissue and blood in 3D echocardiographic images. , 2012, , .		1

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127	Automated 2D ultrasound fusion imaging of abdominal aortic aneurysms. , 2012, , .		1
128	Probing Red Blood Cell Dynamics. , 2012, , .		0
129	Flow Induced Vasodilation in Porcine Carotid Arteries. , 2012, , .		0
130	A method for the quantification of the pressure dependent 3D collagen configuration in the arterial adventitia. <i>Journal of Structural Biology</i> , 2012, 180, 335-342.	2.8	53
131	Response of the authors on: Comment to "Huberts W, Bode AS, Kroon W, Planken RN, Tordoir JHM, van de Vosse FN. A pulse wave propagation model to support decision-making in the clinic [Med Eng Phys 2012;34:233-48]" Medical Engineering and Physics, 2012, 34, 1029.	1.7	1
132	A lumped parameter model of cerebral blood flow control combining cerebral autoregulation and neurovascular coupling. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2012, 303, H1143-H1153.	3.2	51
133	Periprocedural variations of platelet reactivity during elective percutaneous coronary intervention. <i>Journal of Thrombosis and Haemostasis</i> , 2012, 10, 2452-2461.	3.8	34
134	Computational model for estimating the short- and long-term cardiac response to arteriovenous fistula creation for hemodialysis. <i>Medical and Biological Engineering and Computing</i> , 2012, 50, 1289-1298.	2.8	7
135	Patient-Specific Computational Modeling of Upper Extremity Arteriovenous Fistula Creation: Its Feasibility to Support Clinical Decision-Making. <i>PLoS ONE</i> , 2012, 7, e34491.	2.5	27
136	Accuracy and precision of vessel area assessment: Manual versus automatic lumen delineation based on full-width at half-maximum. <i>Journal of Magnetic Resonance Imaging</i> , 2012, 36, 1186-1193.	3.4	25
137	Experimental investigation of collagen waviness and orientation in the arterial adventitia using confocal laser scanning microscopy. <i>Biomechanics and Modeling in Mechanobiology</i> , 2012, 11, 461-473.	2.8	845
138	The fiber orientation in the coronary arterial wall at physiological loading evaluated with a two-fiber constitutive model. <i>Biomechanics and Modeling in Mechanobiology</i> , 2012, 11, 533-542.	2.8	14
139	A pulse wave propagation model to support decision-making in vascular access planning in the clinic. <i>Medical Engineering and Physics</i> , 2012, 34, 233-248.	1.7	77
140	Novel Strategy of the Determination of Mechanical Properties of Human Carotid Atherosclerotic Plaques. , 2012, , .		0
141	Pulse Wave Propagation in the Arterial Tree. <i>Annual Review of Fluid Mechanics</i> , 2011, 43, 467-499.	25.0	287
142	Continuous-Flow Cardiac Assistance: Effects on Aortic Valve Function in a Mock Loop. <i>Journal of Surgical Research</i> , 2011, 171, 443-447.	1.6	39
143	Clinical Study Protocol for the ARCH Project Computational Modeling for Improvement of Outcome after Vascular Access Creation. <i>Journal of Vascular Access</i> , 2011, 12, 369-376.	0.9	23
144	In Vitro Comparison of Support Capabilities of Intra-Aortic Balloon Pump and Impella 2.5 Left Percutaneous. <i>Artificial Organs</i> , 2011, 35, 893-901.	1.9	17

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145	Global sensitivity analysis of a wave propagation model for arm arteries. <i>Medical Engineering and Physics</i> , 2011, 33, 1008-1016.	1.7	24
146	Theoretical models for coronary vascular biomechanics: Progress & challenges. <i>Progress in Biophysics and Molecular Biology</i> , 2011, 104, 49-76.	2.9	62
147	Small coronary calcifications are not detectable by 64-slice contrast enhanced computed tomography. <i>International Journal of Cardiovascular Imaging</i> , 2011, 27, 143-152.	1.5	27
148	A generic constitutive model for the passive porcine coronary artery. <i>Biomechanics and Modeling in Mechanobiology</i> , 2011, 10, 249-258.	2.8	27
149	Thermal anemometric assessment of coronary flow reserve with a pressure-sensing guide wire: An in vitro evaluation. <i>Medical Engineering and Physics</i> , 2011, 33, 684-691.	1.7	7
150	The influence of boundary conditions on wall shear stress distribution in patients specific coronary trees. <i>Journal of Biomechanics</i> , 2011, 44, 1089-1095.	2.1	116
151	Toward Noninvasive Blood Pressure Assessment in Arteries by Using Ultrasound. <i>Ultrasound in Medicine and Biology</i> , 2011, 37, 788-797.	1.5	61
152	A 1D Wave Propagation Model of Coronary Flow in a Beating Heart. , 2011, , .		2
153	MRI Based Quantification of Outflow Boundary Conditions for Computational Fluid Dynamics of Stenosed Human Carotid Arteries. , 2010, , .		0
154	Perpendicular ultrasound velocity measurement by 2D cross correlation of RF data. Part A: validation in a straight tube. <i>Experiments in Fluids</i> , 2010, 49, 1177-1186.	2.4	20
155	Perpendicular ultrasound velocity measurement by 2D cross correlation of RF data. Part B: volume flow estimation in curved vessels. <i>Experiments in Fluids</i> , 2010, 49, 1219-1229.	2.4	15
156	A model for arterial adaptation combining microstructural collagen remodeling and 3D tissue growth. <i>Biomechanics and Modeling in Mechanobiology</i> , 2010, 9, 671-687.	2.8	34
157	3D fusion of intravascular ultrasound and coronary computed tomography for in-vivo wall shear stress analysis: a feasibility study. <i>International Journal of Cardiovascular Imaging</i> , 2010, 26, 781-796.	1.5	69
158	The Influence of Wall Stress on AAA Growth and Biomarkers. <i>European Journal of Vascular and Endovascular Surgery</i> , 2010, 39, 410-416.	1.5	63
159	Response to comments on: "The Influence of Wall Stress on AAA Growth and Biomarkers". <i>European Journal of Vascular and Endovascular Surgery</i> , 2010, 39, 797.	1.5	0
160	Computational modelling of endoleak after endovascular repair of abdominal aortic aneurysms. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2010, 26, 322-335.	2.1	10
161	MRI-based quantification of outflow boundary conditions for computational fluid dynamics of stenosed human carotid arteries. <i>Journal of Biomechanics</i> , 2010, 43, 2332-2338.	2.1	61
162	Estimation of distributed arterial mechanical properties using a wave propagation model in a reverse way. <i>Medical Engineering and Physics</i> , 2010, 32, 957-967.	1.7	39

#	ARTICLE	IF	CITATIONS
163	Improving the thermal dimensional stability of flexible polymer composite backing materials for ultrasound transducers. <i>Ultrasonics</i> , 2010, 50, 458-466.	3.9	15
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