

Patrick Segers

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9034028/publications.pdf>

Version: 2024-02-01

483
papers

18,775
citations

14644

66
h-index

18115

120
g-index

507
all docs

507
docs citations

507
times ranked

16924
citing authors

#	ARTICLE	IF	CITATIONS
1	Transmural Wave Speed Gradient May Distinguish Intrinsic Myocardial Stiffening From Preload-Induced Changes in Operational Stiffness in Shear Wave Elastography. <i>IEEE Transactions on Biomedical Engineering</i> , 2023, 70, 259-270.	2.5	3
2	Assessing cardiac stiffness using ultrasound shear wave elastography. <i>Physics in Medicine and Biology</i> , 2022, 67, 02TR01.	1.6	22
3	Assessment of Stiffness of Large to Small Arteries in Multistage Renal Disease Model: A Numerical Study. <i>Frontiers in Physiology</i> , 2022, 13, 832858.	1.3	3
4	Essential principles of pulsatile pressure-flow relations in the arterial tree. , 2022, , 49-66.		1
5	Measurements of arterial pressure and flow in vivo. , 2022, , 27-47.		2
6	Arterial wall stiffness: basic principles and methods of measurement in vivo. , 2022, , 111-124.		0
7	Mechanism of pulsus bisferiens in thoracoabdominal thoracic aneurysms: Insights from wave intensity analysis. <i>Journal of Clinical Hypertension</i> , 2021, 23, 193-196.	1.0	3
8	Guiding Myocardial Revascularization by Algorithmic Interpretation of FFR Pullback Curves: A Proof of Concept Study. <i>Frontiers in Cardiovascular Medicine</i> , 2021, 8, 623841.	1.1	0
9	Longitudinal Changes of Input Impedance, Pulse Wave Velocity, and Wave Reflection in a Middle-Aged Population. <i>Hypertension</i> , 2021, 77, 1154-1165.	1.3	23
10	Right Ventricular Flow Dynamics in Dilated Right Ventricles: Energy Loss Estimation Based on Blood Speckle Tracking Echocardiography—A Pilot Study in Children. <i>Ultrasound in Medicine and Biology</i> , 2021, 47, 1514-1527.	0.7	15
11	Histological and biomechanical properties of systemic arteries in young and old Warmblood horses. <i>PLoS ONE</i> , 2021, 16, e0253730.	1.1	2
12	Outflow Through Aortic Side Branches Drives False Lumen Patency in Type B Aortic Dissection. <i>Frontiers in Cardiovascular Medicine</i> , 2021, 8, 710603.	1.1	6
13	On the assessment of arterial compliance from carotid pressure waveform. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2021, 321, H424-H434.	1.5	3
14	Template Matching and Matrix Profile for Signal Quality Assessment of Carotid and Femoral Laser Doppler Vibrometer Signals. <i>Frontiers in Physiology</i> , 2021, 12, 775052.	1.3	4
15	Co-localization of microstructural damage and excessive mechanical strain at aortic branches in angiotensin-II-infused mice. <i>Biomechanics and Modeling in Mechanobiology</i> , 2020, 19, 81-97.	1.4	11
16	Muscle strength is a major determinant of the blood pressure response to isometric stress testing: the Asklepios population study. <i>Journal of Hypertension</i> , 2020, 38, 224-234.	0.3	4
17	How to Measure Arterial Stiffness in Humans. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2020, 40, 1034-1043.	1.1	125
18	Impact of varying diastolic pressure fitting technique for the reservoir-wave model on wave intensity analysis. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2020, 234, 1300-1311.	1.0	1

#	ARTICLE	IF	CITATIONS
19	Effect of aortic stiffness versus stenosis on ventriculo-arterial interaction in an experimental model of coarctation repair. <i>European Journal of Cardio-thoracic Surgery</i> , 2020, 58, 1206-1215.	0.6	2
20	Ambulatory Electrocardiographic Monitoring and Ectopic Beat Detection in Conscious Mice. <i>Sensors</i> , 2020, 20, 3867.	2.1	6
21	Mechanical and morphometric study of mitral valve chordae tendineae and related papillary muscle. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 111, 104011.	1.5	9
22	Physiological fluid mechanics: A special Issue with a taster of forefront research. Proceedings of the Institution of Mechanical Engineers, Part H: <i>Journal of Engineering in Medicine</i> , 2020, 234, 1183-1186.	1.0	0
23	Corrosion casting of the cardiovascular structure in adult zebrafish for analysis by scanning electron microscopy and X-ray microtomography. <i>Journal of Veterinary Medicine Series C: Anatomia Histologia Embryologia</i> , 2020, 49, 635-642.	0.3	6
24	Analysis of multiple shear wave modes in a nonlinear soft solid: Experiments and finite element simulations with a tilted acoustic radiation force. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 107, 103754.	1.5	12
25	Silicon photonics-based laser Doppler vibrometer array for carotid-femoral pulse wave velocity (PWV) measurement. <i>Biomedical Optics Express</i> , 2020, 11, 3913.	1.5	13
26	Implications of Changing the Asymptotic Diastolic Pressure in the Reservoir-wave Model on Wave Intensity Parameters: A Parametric Study. <i>Artery Research</i> , 2020, 26, 228-235.	0.3	2
27	Computed Poststenotic Flow Instabilities Correlate Phenotypically With Vibrations Measured Using Laser Doppler Vibrometry: Perspectives for a Promising In Vivo Device for Early Detection of Moderate and Severe Carotid Stenosis. <i>Journal of Biomechanical Engineering</i> , 2020, 142, .	0.6	2
28	Colour-Doppler echocardiography flow field velocity reconstruction using a streamfunction-vorticity formulation. <i>Journal of the Royal Society Interface</i> , 2020, 17, 20200741.	1.5	8
29	Misconceptions About Arterial Stiffness May Lead to Erroneous Conclusions. <i>American Journal of Hypertension</i> , 2020, 33, 402-404.	1.0	5
30	Detecting carotid stenosis from skin vibrations using Laser Doppler Vibrometry – An in vitro proof-of-concept. <i>PLoS ONE</i> , 2019, 14, e0218317.	1.1	6
31	Mixed impact of torsion on LV hemodynamics: A CFD study based on the Chimera technique. <i>Computers in Biology and Medicine</i> , 2019, 112, 103363.	3.9	4
32	Synchrotron-based visualization and segmentation of elastic lamellae in the mouse carotid artery during quasi-static pressure inflation. <i>Journal of the Royal Society Interface</i> , 2019, 16, 20190179.	1.5	7
33	Physics of Within-Tissue Wave Propagation Generated by Pulse Propagation in the Carotid Artery. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 2878.	1.3	0
34	Large-Artery Stiffness in Health and Disease. <i>Journal of the American College of Cardiology</i> , 2019, 74, 1237-1263.	1.2	512
35	The Impact of Size and Position of a Mechanical Expandable transcatheter Aortic Valve: Novel Insights Through Computational Modelling and Simulation. <i>Journal of Cardiovascular Translational Research</i> , 2019, 12, 435-446.	1.1	19
36	A 1D computer model of the arterial circulation in horses: An important resource for studying global interactions between heart and vessels under normal and pathological conditions. <i>PLoS ONE</i> , 2019, 14, e0221425.	1.1	2

#	ARTICLE	IF	CITATIONS
37	Arterial Properties as Determinants of Left Ventricular Mass and Fibrosis in Severe Aortic Stenosis: Findings From ACRIN PA 4008. <i>Journal of the American Heart Association</i> , 2019, 8, e03742.	1.6	19
38	Using machine learning to characterize heart failure across the scales. <i>Biomechanics and Modeling in Mechanobiology</i> , 2019, 18, 1987-2001.	1.4	53
39	Optimization of a Transcatheter Heart Valve Frame Using Patient-Specific Computer Simulation. <i>Cardiovascular Engineering and Technology</i> , 2019, 10, 456-468.	0.7	21
40	Tomographic PIV in a model of the left ventricle: 3D flow past biological and mechanical heart valves. <i>Journal of Biomechanics</i> , 2019, 90, 40-49.	0.9	28
41	High-Frequency Fluctuations in Post-stenotic Patient Specific Carotid Stenosis Fluid Dynamics: A Computational Fluid Dynamics Strategy Study. <i>Cardiovascular Engineering and Technology</i> , 2019, 10, 277-298.	0.7	18
42	Mapping the site-specific accuracy of loop-based local pulse wave velocity estimation and reflection magnitude: a 1D arterial network model analysis. <i>Physiological Measurement</i> , 2019, 40, 075002.	1.2	7
43	The aorta after coarctation repair – effects of calibre and curvature on arterial haemodynamics. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2019, 21, 22.	1.6	16
44	A 3D CFD model of the interstitial fluid pressure and drug distribution in heterogeneous tumor nodules during intraperitoneal chemotherapy. <i>Drug Delivery</i> , 2019, 26, 404-415.	2.5	35
45	Impact of Diabetes Mellitus on Ventricular Structure, Arterial Stiffness, and Pulsatile Hemodynamics in Heart Failure With Preserved Ejection Fraction. <i>Journal of the American Heart Association</i> , 2019, 8, e011457.	1.6	45
46	Proximal pressure reducing effect of wave reflection in the pulmonary circulation disappear in obstructive disease: insight from a rabbit model. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2019, 316, H992-H1004.	1.5	1
47	Non-invasive intraventricular pressure differences estimated with cardiac MRI in subjects without heart failure and with heart failure with reduced and preserved ejection fraction. <i>Open Heart</i> , 2019, 6, e001088.	0.9	3
48	Measuring elastic nonlinearity in a soft solid using a tilted acoustic radiation force for shear wave excitation. , 2019, , .		0
49	MEASUREMENT OF AORTIC STIFFNESS BY LASER DOPPLER VIBROMETRY. <i>Journal of Hypertension</i> , 2019, 37, e88.	0.3	2
50	MRI-enabled noninvasive wave intensity analysis. <i>Journal of Hypertension</i> , 2019, 37, 287-289.	0.3	1
51	Kinematic boundary conditions substantially impact in silico ventricular function. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2019, 35, e3151.	1.0	19
52	Effect of Obesity on Left Atrial Strain in Persons Aged 35–55 Years (The Asklepios Study). <i>American Journal of Cardiology</i> , 2019, 123, 854-861.	0.7	31
53	Analysis of several subcycling schemes in partitioned simulations of a strongly coupled fluid–structure interaction. <i>International Journal for Numerical Methods in Fluids</i> , 2019, 89, 181-195.	0.9	6
54	Application of the wave-reservoir approach to different aortic sites. <i>Journal of Hypertension</i> , 2018, 36, 963-964.	0.3	2

#	ARTICLE	IF	CITATIONS
55	Closed-Loop Lumped Parameter Modeling of Hemodynamics During Cirrhogenesis in Rats. IEEE Transactions on Biomedical Engineering, 2018, 65, 2311-2322.	2.5	16
56	Single calibration multiplane stereo-PIV: the effect of mitral valve orientation on three-dimensional flow in a left ventricle model. Experiments in Fluids, 2018, 59, 1.	1.1	13
57	Effect of organic and inorganic nitrates on cerebrovascular pulsatile power transmission in patients with heart failure and preserved ejection fraction. Physiological Measurement, 2018, 39, 044001.	1.2	10
58	An <i>in silico</i> framework to analyze the anisotropic shear wave mechanics in cardiac shear wave elastography. Physics in Medicine and Biology, 2018, 63, 075005.	1.6	18
59	Propagation-based phase-contrast synchrotron imaging of aortic dissection in mice: from individual elastic lamella to 3D analysis. Scientific Reports, 2018, 8, 2223.	1.6	23
60	Patient-Specific Computer Simulation to Elucidate the Role of Contact Pressure in the Development of New Conduction Abnormalities After Catheter-Based Implantation of a Self-Expanding Aortic Valve. Circulation: Cardiovascular Interventions, 2018, 11, e005344.	1.4	74
61	A unified mechanism for the water hammer pulse and pulsus bisferiens in severe aortic regurgitation: Insights from wave intensity analysis. Artery Research, 2018, 21, 9.	0.3	8
62	The role of biomechanics in aortic aneurysm management: requirements, open problems and future prospects. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 77, 295-307.	1.5	23
63	An <i>in silico</i> biomechanical analysis of the stent-oesophagus interaction. Biomechanics and Modeling in Mechanobiology, 2018, 17, 111-131.	1.4	17
64	Quantitative analysis of hepatic macro- and microvascular alterations during cirrhogenesis in the rat. Journal of Anatomy, 2018, 232, 485-496.	0.9	17
65	Should We Ignore What We Cannot Measure? How Non-Uniform Stretch, Non-Uniform Wall Thickness and Minor Side Branches Affect Computational Aortic Biomechanics in Mice. Annals of Biomedical Engineering, 2018, 46, 159-170.	1.3	9
66	Assessment of methodologies to calculate intraventricular pressure differences in computational models and patients. Medical and Biological Engineering and Computing, 2018, 56, 469-481.	1.6	9
67	Analyzing the Shear Wave Mechanics in Cardiac Shear Wave Elastography Using Finite Element Simulations. , 2018, , .		1
68	Investigating the Degree of Shear Wave Speed Anisotropy as a Function of Studied Ventricular Zone. , 2018, , .		1
69	A Fast 4D B-Spline Framework for Model-Based Reconstruction and Regularization in Vector Flow Imaging. , 2018, , .		4
70	Synchrotron-based phase contrast imaging of cardiovascular tissue in mice – grating interferometry or phase propagation?. Biomedical Physics and Engineering Express, 2018, 5, 015010.	0.6	3
71	A modular inverse elastostatics approach to resolve the pressure-induced stress state for <i>in vivo</i> imaging based cardiovascular modeling. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 85, 124-133.	1.5	23
72	From 4D Medical Images (CT, MRI, and Ultrasound) to 4D Structured Mesh Models of the Left Ventricular Endocardium for Patient-Specific Simulations. BioMed Research International, 2018, 2018, 1-14.	0.9	10

#	ARTICLE	IF	CITATIONS
73	Reversal of Aging-Induced Increases in Aortic Stiffness by Targeting Cytoskeletal Protein-Protein Interfaces. <i>Journal of the American Heart Association</i> , 2018, 7, .	1.6	17
74	Reply to Comment on "Numerical assessment and comparison of pulse wave velocity methods aiming at measuring aortic stiffness". <i>Physiological Measurement</i> , 2018, 39, 078002.	1.2	2
75	Measuring pulmonary arterial compliance: mission impossible? Insights from a novel in vivo continuous-flow based experimental model. <i>Pulmonary Circulation</i> , 2018, 8, 1-12.	0.8	7
76	Procedure to describe clavicular motion. <i>Journal of Shoulder and Elbow Surgery</i> , 2017, 26, 490-496.	1.2	2
77	Abnormal Wave Reflections and Left Ventricular Hypertrophy Late After Coarctation of the Aorta Repair. <i>Hypertension</i> , 2017, 69, 501-509.	1.3	69
78	Isosorbide Dinitrate, With or Without Hydralazine, Does Not Reduce Wave Reflections, Left Ventricular Hypertrophy, or Myocardial Fibrosis in Patients With Heart Failure With Preserved Ejection Fraction. <i>Journal of the American Heart Association</i> , 2017, 6, .	1.6	36
79	Grading of mitral regurgitation based on intensity analysis of the continuous wave Doppler signal. <i>Heart</i> , 2017, 103, 190-197.	1.2	14
80	Mathematical modeling of intraperitoneal drug delivery: simulation of drug distribution in a single tumor nodule. <i>Drug Delivery</i> , 2017, 24, 491-501.	2.5	64
81	Validation of non-invasive central blood pressure devices: ARTERY Society task force consensus statement on protocol standardization. <i>European Heart Journal</i> , 2017, 38, 2805-2812.	1.0	175
82	A finite element model to study the effect of tissue anisotropy on <i>ex vivo</i> arterial shear wave elastography measurements. <i>Physics in Medicine and Biology</i> , 2017, 62, 5245-5275.	1.6	6
83	Towards a consensus on the understanding and analysis of the pulse waveform: Results from the 2016 Workshop on Arterial Hemodynamics: Past, present and future. <i>Artery Research</i> , 2017, 18, 75.	0.3	44
84	Relative contributions from the ventricle and arterial tree to arterial pressure and its amplification: an experimental study. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2017, 313, H558-H567.	1.5	21
85	Effects of organic and inorganic nitrate on aortic and carotid haemodynamics in heart failure with preserved ejection fraction. <i>European Journal of Heart Failure</i> , 2017, 19, 1507-1515.	2.9	40
86	Hemodynamic Impact of the "Pulse Cardiac Support Device: A One-Dimensional Arterial Model Study. <i>Artificial Organs</i> , 2017, 41, E141-E154.	1.0	5
87	A multilevel framework to reconstruct anatomical 3D models of the hepatic vasculature in rat livers. <i>Journal of Anatomy</i> , 2017, 230, 471-483.	0.9	20
88	Numerical assessment and comparison of pulse wave velocity methods aiming at measuring aortic stiffness. <i>Physiological Measurement</i> , 2017, 38, 1953-1967.	1.2	25
89	Vascular Smooth Muscle Cells and Arterial Stiffening: Relevance in Development, Aging, and Disease. <i>Physiological Reviews</i> , 2017, 97, 1555-1617.	13.1	466
90	Optimization of dialyzer design to maximize solute removal with a two-dimensional transport model. <i>Journal of Membrane Science</i> , 2017, 541, 519-528.	4.1	26

#	ARTICLE	IF	CITATIONS
91	Vascular morphology alterations during liver cirrhogenesis in rats. <i>Journal of Hepatology</i> , 2017, 66, S394-S395.	1.8	0
92	A lesson in vigilance. <i>Journal of Hypertension</i> , 2017, 35, 33-35.	0.3	9
93	Validation of non-invasive central blood pressure devices: Artery society task force (abridged) consensus statement on protocol standardization. <i>Artery Research</i> , 2017, 20, 35.	0.3	7
94	Angiotensin II infusion into ApoE ^{-/-} mice: a model for aortic dissection rather than abdominal aortic aneurysm?. <i>Cardiovascular Research</i> , 2017, 113, 1230-1242.	1.8	78
95	Wall Shear Rate Measurement: Validation of a New Method Through Multiphysics Simulations. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2017, 64, 66-77.	1.7	17
96	Investigating Shear Wave Physics in a Generic Pediatric Left Ventricular Model via <i>In Vitro</i> Experiments and Finite Element Simulations. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2017, 64, 349-361.	1.7	17
97	Patient-specific CFD models for intraventricular flow analysis from 3D ultrasound imaging: Comparison of three clinical cases. <i>Journal of Biomechanics</i> , 2017, 50, 144-150.	0.9	30
98	ARTERIAL HEMODYNAMICS AND WAVE REFLECTIONS. <i>Artery Research</i> , 2017, 20, 46.	0.3	0
99	Effect of Ultrafast Imaging on Shear Wave Visualization and Characterization: An Experimental and Computational Study in a Pediatric Ventricular Model. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 840.	1.3	12
100	False Lumen Flow Patterns and their Relation with Morphological and Biomechanical Characteristics of Chronic Aortic Dissections. Computational Model Compared with Magnetic Resonance Imaging Measurements. <i>PLoS ONE</i> , 2017, 12, e0170888.	1.1	26
101	The effect of stretching on transmural shear wave anisotropy in cardiac shear wave elastography. , 2017, , .		2
102	Modelling drug transport during intraperitoneal chemotherapy. <i>Pleura and Peritoneum</i> , 2017, 2, 73-83.	0.5	18
103	Impact of plaque type and side branch geometry on side branch compromise after provisional stent implantation: a simulation study. <i>EuroIntervention</i> , 2017, 13, e236-e245.	1.4	13
104	Bone Structural Similarity Score: A Multiparametric Tool to Match Properties of Biomimetic Bone Substitutes with their Target Tissues. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2016, 14, e277-e289.	0.7	10
105	Reply to: "Letter to the editor: Comparing pace and speed in the pulmonary circulation?" <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2016, 310, H950-H950.	1.5	0
106	Coronary fractional flow reserve measurements of a stenosed side branch: a computational study investigating the influence of the bifurcation angle. <i>BioMedical Engineering OnLine</i> , 2016, 15, 91.	1.3	22
107	10.6 VARIATION OF THE ASYMPTOTIC DIASTOLIC PRESSURE WITH DIFFERENT FITTING TECHNIQUES IN HEALTHY HUMANS. <i>Artery Research</i> , 2016, 16, 72.	0.3	0
108	15.8 AN EXTENDED ONE-DIMENSIONAL ARTERIAL NETWORK MODEL FOR THE SIMULATION OF PRESSURE AND FLOW IN UPPER AND LOWER LIMB EXTREMITIES. <i>Artery Research</i> , 2016, 16, 87.	0.3	0

#	ARTICLE	IF	CITATIONS
109	CONSTITUENT BASED MODELLING OF ARTERIAL WALL MECHANICS. <i>Artery Research</i> , 2016, 16, 47.	0.3	0
110	Pulsatile Load Components, Resistive Load and Incident Heart Failure: The Multi-Ethnic Study of Atherosclerosis (MESA). <i>Journal of Cardiac Failure</i> , 2016, 22, 988-995.	0.7	33
111	Aging is Associated With an Earlier Arrival of Reflected Waves Without a Distal Shift in Reflection Sites. <i>Journal of the American Heart Association</i> , 2016, 5, .	1.6	43
112	Assessing the Performance of Ultrafast Vector Flow Imaging in the Neonatal Heart via Multiphysics Modeling and <i>In Vitro</i> Experiments. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2016, 63, 1772-1785.	1.7	27
113	Standardization of Arterial Stiffness Measurements Make Them Ready for Use in Clinical Practice: Table 1.. <i>American Journal of Hypertension</i> , 2016, 29, 1234-1236.	1.0	23
114	Patient-specific CFD simulation of intraventricular haemodynamics based on 3D ultrasound imaging. <i>BioMedical Engineering OnLine</i> , 2016, 15, 107.	1.3	33
115	Model-based estimation of intra-cardiac blood flow velocities using an unscented Kalman filter. , 2016, , .		0
116	2-D Versus 3-D Cross-Correlation-Based Radial and Circumferential Strain Estimation Using Multiplane 2-D Ultrafast Ultrasound in a 3-D Atherosclerotic Carotid Artery Model. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2016, 63, 1543-1553.	1.7	20
117	Finite element simulations to support the measurement and analysis of Shear Wave Dispersion. , 2016, , .		0
118	The influence of anesthesia and fluid-structure interaction on simulated shear stress patterns in the carotid bifurcation of mice. <i>Journal of Biomechanics</i> , 2016, 49, 2741-2747.	0.9	22
119	MRI Assessment of Diastolic and Systolic Intraventricular Pressure Gradients in Heart Failure. <i>Current Heart Failure Reports</i> , 2016, 13, 37-46.	1.3	5
120	A Computational Framework to Model Degradation of Biocorrosible Metal Stents Using an Implicit Finite Element Solver. <i>Annals of Biomedical Engineering</i> , 2016, 44, 382-390.	1.3	17
121	A Finite Element Method to Predict Adverse Events in Intracranial Stenting Using Microstents: In Vitro Verification and Patient Specific Case Study. <i>Annals of Biomedical Engineering</i> , 2016, 44, 442-452.	1.3	9
122	Pitfalls of Doppler Measurements for Arterial Blood Flow Quantification in Small Animal Research: A Study Based on Virtual Ultrasound Imaging. <i>Ultrasound in Medicine and Biology</i> , 2016, 42, 1399-1411.	0.7	3
123	Ascending Aortic Aneurysm in Angiotensin II-Infused Mice. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2016, 36, 673-681.	1.1	65
124	Optimization of construct perfusion in radial-flow packed-bed bioreactors for tissue engineering with a 2D stationary fluid dynamic model. <i>Biochemical Engineering Journal</i> , 2016, 109, 197-211.	1.8	1
125	Misinterpretation of the Determinants of Elevated Forward Wave Amplitude Inflates the Role of the Proximal Aorta. <i>Journal of the American Heart Association</i> , 2016, 5, .	1.6	56
126	Shear Stress Metrics and Their Relation to Atherosclerosis: An In Vivo Follow-up Study in Atherosclerotic Mice. <i>Annals of Biomedical Engineering</i> , 2016, 44, 2327-2338.	1.3	21

#	ARTICLE	IF	CITATIONS
127	Assessment of shear stress related parameters in the carotid bifurcation using mouse-specific FSI simulations. <i>Journal of Biomechanics</i> , 2016, 49, 2135-2142.	0.9	26
128	Differential impact of local stiffening and narrowing on hemodynamics in repaired aortic coarctation: an FSI study. <i>Medical and Biological Engineering and Computing</i> , 2016, 54, 497-510.	1.6	21
129	Unstructured hexahedral mesh generation of complex vascular trees using a multi-block grid-based approach. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2016, 19, 663-672.	0.9	11
130	Proximal aortic stiffening in Turner patients may be present before dilation can be detected: a segmental functional MRI study. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 19, 27.	1.6	24
131	Fluid-Structure Interaction Simulation of Prosthetic Aortic Valves: Comparison between Immersed Boundary and Arbitrary Lagrangian-Eulerian Techniques for the Mesh Representation. <i>PLoS ONE</i> , 2016, 11, e0154517.	1.1	59
132	A 1D model of the arterial circulation in mice. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2016, 33, 13-28.	0.9	17
133	Patient-specific image-based computer simulation for the prediction of valve morphology and calcium displacement after TAVI with the Medtronic CoreValve and the Edwards SAPIEN valve. <i>EuroIntervention</i> , 2016, 11, 1044-1052.	1.4	67
134	2D versus 3D cross-correlation-based radial and circumferential strain imaging in a 3D atherosclerotic carotid artery model using ultrafast plane wave ultrasound. , 2015, , .		7
135	4D.01. <i>Journal of Hypertension</i> , 2015, 33, e60.	0.3	5
136	Response to Errors of Fact in the Recent Article by Westerhof, Segers, and Westerhof. <i>Hypertension</i> , 2015, 66, .	1.3	0
137	Experimental study on the effect of the cylindrical vessel geometry on arterial shear wave elastography. , 2015, , .		0
138	A numerical study of ultrafast vector flow imaging in the neonatal heart. , 2015, , .		1
139	Reference values for local arterial stiffness. Part A. <i>Journal of Hypertension</i> , 2015, 33, 1981-1996.	0.3	96
140	MR pulse wave velocity increases with age faster in the thoracic aorta than in the abdominal aorta. <i>Journal of Magnetic Resonance Imaging</i> , 2015, 41, 765-772.	1.9	26
141	8A.03. <i>Journal of Hypertension</i> , 2015, 33, e104-e105.	0.3	0
142	Reference values for local arterial stiffness. Part B. <i>Journal of Hypertension</i> , 2015, 33, 1997-2009.	0.3	51
143	Vulnerable Plaque Detection and Quantification with Gold Particle-Enhanced Computed Tomography in Atherosclerotic Mouse Models. <i>Molecular Imaging</i> , 2015, 14, 7290.2015.00009.	0.7	12
144	Performance Comparison of Ultrasound-Based Methods to Assess Aortic Diameter and Stiffness in Normal and Aneurysmal Mice. <i>PLoS ONE</i> , 2015, 10, e0129007.	1.1	22

#	ARTICLE	IF	CITATIONS
145	Assessment of Model Based (Input) Impedance, Pulse Wave Velocity, and Wave Reflection in the Asklepios Cohort. PLoS ONE, 2015, 10, e0141656.	1.1	22
146	Wave Separation, Wave Intensity, the Reservoir-Wave Concept, and the Instantaneous Wave-Free Ratio. Hypertension, 2015, 66, 93-98.	1.3	73
147	Recommendations on the use of echocardiography in adult hypertension: a report from the European Association of Cardiovascular Imaging (EACVI) and the American Society of Echocardiography (ASE) &sup><xref ref-type="fn" rid="AN1">&at</xref></sup>. European Heart Journal Cardiovascular Imaging, 2015, 16, 577-605.	0.5	190
148	Resistive and Pulsatile Arterial Load as Predictors of Left Ventricular Mass and Geometry. Hypertension, 2015, 65, 85-92.	1.3	75
149	Vascular Dysregulation in Normal-Tension Glaucoma Is Not Affected by Structure and Function of the Microcirculation or Macrocirculation at Rest. Medicine (United States), 2015, 94, e425.	0.4	19
150	Myocardial stiffness assessment in pediatric cardiology using shear wave imaging. , 2015, , .		0
151	Wall Shear Rate method validation through multi-physics simulations. , 2015, , .		1
152	Changes in Central Hemodynamics, Wave Reflection, and Heartâ€“Vessel Coupling with Normal and Accelerated Aging. , 2015, , 83-95.		3
153	Noninvasive pulmonary artery wave intensity analysis in pulmonary hypertension. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 308, H1603-H1611.	1.5	60
154	Incidence, severity, mortality, and confounding factors for dissecting AAA detection in angiotensin II-infused mice: a meta-analysis. Cardiovascular Research, 2015, 108, 159-170.	1.8	31
155	Late Systolic Central Hypertension as a Predictor of Incident Heart Failure: The Multiâ€“Ethnic Study of Atherosclerosis. Journal of the American Heart Association, 2015, 4, e001335.	1.6	44
156	P5.14 THIGH-CUFF BASED MEASUREMENT OF AORTIC PULSE WAVE VELOCITY: INITIAL TESTING OF A NOVEL VASERA PROTOTYPE DEVICE. Artery Research, 2015, 12, 23.	0.3	0
157	A versatile and experimentally validated finite element model to assess the accuracy of shear wave elastography in a bounded viscoelastic medium. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 439-450.	1.7	23
158	Recommendations on the Use of Echocardiography in Adult Hypertension: A Report from the European Association of Cardiovascular Imaging (EACVI) and the American Society of Echocardiography (ASE)â€“. Journal of the American Society of Echocardiography, 2015, 28, 727-754.	1.2	298
159	A Multilevel Modeling Framework to Study Hepatic Perfusion Characteristics in Case of Liver Cirrhosis. Journal of Biomechanical Engineering, 2015, 137, 051007.	0.6	29
160	Non-invasive, energy-based assessment of patient-specific material properties of arterial tissue. Biomechanics and Modeling in Mechanobiology, 2015, 14, 1045-1056.	1.4	28
161	The aortic reservoir-wave as a paradigm for arterial haemodynamics. Journal of Hypertension, 2015, 33, 554-563.	0.3	18
162	An Animal-Specific FSI Model of the Abdominal Aorta in Anesthetized Mice. Annals of Biomedical Engineering, 2015, 43, 1298-1309.	1.3	28

#	ARTICLE	IF	CITATIONS
163	A finite element strategy to investigate the free expansion behaviour of a biodegradable polymeric stent. <i>Journal of Biomechanics</i> , 2015, 48, 2012-2018.	0.9	50
164	Intrinsic cardiomyopathy in Marfan syndrome: results from in-vivo and ex-vivo studies of the Fbn1C1039G/+ model and longitudinal findings in humans. <i>Pediatric Research</i> , 2015, 78, 256-263.	1.1	45
165	Dissecting abdominal aortic aneurysm in Ang II-infused mice: suprarenal branch ruptures and apparent luminal dilatation. <i>Cardiovascular Research</i> , 2015, 105, 213-222.	1.8	59
166	2.2 RE-REFLECTION OF BACKWARD PROPAGATING WAVES LEADS TO AMPLIFICATION OF THE FORWARD PRESSURE WAVE IN WAVE SEPARATION ANALYSIS. <i>Artery Research</i> , 2015, 12, 41.	0.3	0
167	Influence of Valve Size, Orientation and Downstream Geometry of an Aortic BMHV on Leaflet Motion and Clinically Used Valve Performance Parameters. <i>Annals of Biomedical Engineering</i> , 2015, 43, 1370-1384.	1.3	2
168	Assessment of Wall Elasticity Variations on Intraluminal Haemodynamics in Descending Aortic Dissections Using a Lumped-Parameter Model. <i>PLoS ONE</i> , 2015, 10, e0124011.	1.1	11
169	Dissecting abdominal aortic aneurysm in Angiotensin II-infused mice: the importance of imaging. <i>Current Pharmaceutical Design</i> , 2015, 21, 4049-4060.	0.9	8
170	Feasibility of a Priori Numerical Assessment of Plaque Scaffolding after Carotid Artery Stenting in Clinical Routine: Proof of Concept. <i>International Journal of Artificial Organs</i> , 2014, 37, 928-939.	0.7	8
171	Validation and Calibration of an Electrical Analog Model of Human Liver Perfusion Based on Hypothermic Machine Perfusion Experiments. <i>International Journal of Artificial Organs</i> , 2014, 37, 486-498.	0.7	10
172	Absence of Cardiovascular Manifestations in a Haploinsufficient Tgfb1 Mouse Model. <i>PLoS ONE</i> , 2014, 9, e89749.	1.1	9
173	Semi-3D strain imaging of an atherosclerotic carotid artery by multi-cross-sectional radial strain estimations using simulated multi-angle plane wave ultrasound. , 2014, , .		2
174	Reflection Magnitude as a Predictor of Mortality. <i>Hypertension</i> , 2014, 64, 958-964.	1.3	79
175	Non-invasive technique for assessment of vascular wall stiffness using laser Doppler vibrometry. <i>Measurement Science and Technology</i> , 2014, 25, 065701.	1.4	16
176	Improved Wall Shear Rate method for robust measurements. , 2014, , .		4
177	Update of the European Association of Cardiovascular Imaging (EACVI) Core Syllabus for the European Cardiovascular Magnetic Resonance Certification Exam. <i>European Heart Journal Cardiovascular Imaging</i> , 2014, 15, 728-729.	0.5	21
178	Impaired Cardiovascular Structure and Function in Adult Survivors of Severe Acute Malnutrition. <i>Hypertension</i> , 2014, 64, 664-671.	1.3	47
179	What if you stretch the IFU? A mechanical insight into stent graft Instructions For Use in angulated proximal aneurysm necks. <i>Medical Engineering and Physics</i> , 2014, 36, 1567-1576.	0.8	23
180	Engineering Point of View on Liver Transplantation Strategies: Multi-Level Modeling of Hepatic Perfusion. <i>Transplantation Proceedings</i> , 2014, 46, 3143-3146.	0.3	2

#	ARTICLE	IF	CITATIONS
181	Analyzing the human liver vascular architecture by combining vascular corrosion casting and micro-CT scanning: a feasibility study. <i>Journal of Anatomy</i> , 2014, 224, 509-517.	0.9	77
182	Development and validation of a novel method to derive central aortic systolic pressure from the MR aortic distension curve. <i>Journal of Magnetic Resonance Imaging</i> , 2014, 40, 1064-1070.	1.9	25
183	Effective Arterial Elastance Is Insensitive to Pulsatile Arterial Load. <i>Hypertension</i> , 2014, 64, 1022-1031.	1.3	48
184	Asymmetry in prevalence of femoral but not carotid atherosclerosis. <i>Journal of Hypertension</i> , 2014, 32, 1429-1434.	0.3	10
185	Longitudinal follow-up of ascending versus abdominal aortic aneurysm formation in angiotensin II-infused ApoE ^{-/-} mice. <i>Artery Research</i> , 2014, 8, 16.	0.3	4
186	Novel magnetic resonance wave intensity analysis in pulmonary hypertension. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2014, 16, P252.	1.6	3
187	Provisional Stenting of Coronary Bifurcations. <i>JACC: Cardiovascular Interventions</i> , 2014, 7, 325-333.	1.1	53
188	Fluid-structure interaction simulation of pulse propagation in arteries: Numerical pitfalls and hemodynamic impact of a local stiffening. <i>International Journal of Engineering Science</i> , 2014, 77, 1-13.	2.7	20
189	P11.1 THE PU AND QA LOOP METHODS OVER- AND UNDERESTIMATE LOCAL CAROTID WAVE SPEED: A CONSISTENT EXPLANATION AND SOLUTION TO THE PROBLEM. <i>Artery Research</i> , 2014, 8, 161.	0.3	0
190	4.1 NORMAL VALUES AND DETERMINANTS OF FEMORAL ARTERY STIFFNESS. <i>Artery Research</i> , 2014, 8, 126.	0.3	0
191	P8.13 A 1-D MODEL OF THE SYSTEMIC ARTERIAL TREE IN MICE. <i>Artery Research</i> , 2014, 8, 154.	0.3	0
192	Carotid haemodynamics during sympathetic nervous system stimulation via handgrip and cold pressor testing in young healthy subjects: A feasibility study. <i>Artery Research</i> , 2014, 8, 178.	0.3	0
193	P6.8 EFFECT OF ORGANIC NITRATES ON INTRAVENTRICULAR PRESSURE GRADIENTS IN HEART FAILURE PATIENTS WITH PRESERVED EJECTION FRACTION. <i>Artery Research</i> , 2014, 8, 147.	0.3	0
194	A multi-angle plane wave imaging approach for high frequency 2D flow visualization in small animals: Simulation study in the murine arterial system. , 2014, , .		1
195	Wave reflection leads to over- and underestimation of local wave speed by the PU- and QA-loop methods: theoretical basis and solution to the problem. <i>Physiological Measurement</i> , 2014, 35, 847-861.	1.2	56
196	The influence of vascular anatomy on carotid artery stenting: A parametric study for damage assessment. <i>Journal of Biomechanics</i> , 2014, 47, 890-898.	0.9	23
197	Arterial compliance across the spectrum of ankle-brachial index: The multiethnic study of atherosclerosis. <i>Atherosclerosis</i> , 2014, 233, 691-696.	0.4	13
198	Validation of a numerical FSI simulation of an aortic BMHV by in vitro PIV experiments. <i>Medical Engineering and Physics</i> , 2014, 36, 1014-1023.	0.8	19

#	ARTICLE	IF	CITATIONS
199	P22 NUMERICAL SIMULATIONS TO CHARACTERIZE THE HEPATIC MICROCIRCULATION IN HUMAN CIRRHOSIS. <i>Journal of Hepatology</i> , 2014, 60, S73-S74.	1.8	0
200	A 3D porous media liver lobule model: the importance of vascular septa and anisotropic permeability for homogeneous perfusion. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2014, 17, 1295-1310.	0.9	43
201	Supersonic Shear Wave Imaging to Assess Arterial Nonlinear Behavior and Anisotropy: Proof of Principle via <i>Ex Vivo</i> Testing of the Horse Aorta. <i>Advances in Mechanical Engineering</i> , 2014, 6, 272586.	0.8	24
202	On Cross-Sectional Associations of Leukocyte Telomere Length with Cardiac Systolic, Diastolic and Vascular Function: The Asklepios Study. <i>PLoS ONE</i> , 2014, 9, e115071.	1.1	19
203	Ventricular-Arterial Coupling and Mechanism of Wave Reflections. , 2014, , 37-50.		0
204	Direct Measurement of Local Arterial Stiffness and Pulse Pressure. , 2014, , 23-35.		1
205	Computer Simulations in Stroke Prevention: Design Tools and Virtual Strategies Towards Procedure Planning. <i>Cardiovascular Engineering and Technology</i> , 2013, 4, 291-308.	0.7	2
206	Modeling Hemodynamics in Vascular Networks Using a Geometrical Multiscale Approach: Numerical Aspects. <i>Annals of Biomedical Engineering</i> , 2013, 41, 1445-1458.	1.3	17
207	Haemodynamic impact of stentâ€vessel (mal)apposition following carotid artery stenting: mind the gaps!. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2013, 16, 648-659.	0.9	27
208	Modelling the left ventricle using rapid prototyping techniques. <i>Irbm</i> , 2013, 34, 226-234.	3.7	0
209	Simultaneous quantification of flow and tissue velocities based on multi-angle plane wave imaging. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2013, 60, 727-738.	1.7	115
210	The multigate Doppler approach for assessing hemodynamics in a forearm vascular access for hemodialysis purposes. , 2013, , .		1
211	Comparison of Non-Invasive Methods for Measurement of Local Pulse Wave Velocity Using FSI-Simulations and In Vivo Data. <i>Annals of Biomedical Engineering</i> , 2013, 41, 1567-1578.	1.3	41
212	P6.15 HAEMODYNAMIC-MECHANICAL INTERACTION IN TYPE-B AORTIC DISSECTION: EXPERIMENTAL AND COMPUTER MODEL STUDY. <i>Artery Research</i> , 2013, 7, 158.	0.3	0
213	P3.25 THE EFFECT OF DIASTOLIC ASYMPTOTIC PRESSURE ON THE RESERVOIR PRESSURE IN HUMAN. <i>Artery Research</i> , 2013, 7, 133.	0.3	0
214	4.3 CAROTID HEMODYNAMICS DURING SYMPATHETIC NERVOUS SYSTEM STIMULATION VIA HANDGRIP AND COLD PRESSURE TESTING IN YOUNG HEALTHY SUBJECTS. <i>Artery Research</i> , 2013, 7, 167.	0.3	0
215	A computational exploration of helical arterio-venous graft designs. <i>Journal of Biomechanics</i> , 2013, 46, 345-353.	0.9	40
216	Science versus design; comparable, contrastive or conducive?. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2013, 21, 195-201.	1.5	6

#	ARTICLE	IF	CITATIONS
217	559 SEMI-AUTOMATIC ANALYSIS OF THE BRANCHING TOPOLOGY AND GEOMETRICAL CHARACTERISTICS OF HEPATIC VASCULAR TREES. <i>Journal of Hepatology</i> , 2013, 58, S230.	1.8	0
218	Filling the void: A coalescent numerical and experimental technique to determine aortic stent graft mechanics. <i>Journal of Biomechanics</i> , 2013, 46, 2477-2482.	0.9	32
219	A computational method to assess the in vivo stresses and unloaded configuration of patient-specific blood vessels. <i>Journal of Computational and Applied Mathematics</i> , 2013, 246, 10-17.	1.1	107
220	A model expression for the ambulatory arterial stiffness index. <i>Journal of Hypertension</i> , 2013, 31, 211-212.	0.3	4
221	Reference intervals for common carotid intima-media thickness measured with echotracking: relation with risk factors. <i>European Heart Journal</i> , 2013, 34, 2368-2380.	1.0	228
222	On-chip laser Doppler vibrometer for arterial pulse wave velocity measurement. <i>Biomedical Optics Express</i> , 2013, 4, 1229.	1.5	35
223	Variability of Computational Fluid Dynamics Solutions for Pressure and Flow in a Giant Aneurysm: The ASME 2012 Summer Bioengineering Conference CFD Challenge. <i>Journal of Biomechanical Engineering</i> , 2013, 135, 021016.	0.6	109
224	Characterization of Cardiovascular Involvement in Pseudoxanthoma Elasticum Families. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2013, 33, 2646-2652.	1.1	62
225	Increased Arterial Stiffness in Pre-eclamptic Pregnancy at Term and Early and Late Postpartum: A Combined Echocardiographic and Tonometric Study. <i>American Journal of Hypertension</i> , 2013, 26, 549-556.	1.0	40
226	Central Pulse Pressure and Its Hemodynamic Determinants in Middle-Aged Adults With Impaired Fasting Glucose and Diabetes. <i>Diabetes Care</i> , 2013, 36, 2359-2365.	4.3	64
227	Supersonic shear wave imaging to assess arterial anisotropy: Ex-vivo testing of the horse aorta. , 2013, , .		3
228	A Computational Study of the Hemodynamic Impact of Open- Versus Closed-Cell Stent Design in Carotid Artery Stenting. <i>Artificial Organs</i> , 2013, 37, E96-E106.	1.0	15
229	Abdominal Aortic Stent Graft Mechanics: Sizing Them Up. , 2013, , .		0
230	Marfan related cardiomyopathy: an in vivo and in vitro study of the fbn1C1039G/+ mouse model. <i>European Heart Journal</i> , 2013, 34, 2603-2603.	1.0	0
231	One year of high-intensity interval training improves exercise capacity, but not systemic arterial function in stable heart transplant recipients. <i>European Heart Journal</i> , 2013, 34, P5780-P5780.	1.0	0
232	Early and Late Systolic Wall Stress Differentially Relate to Myocardial Contraction and Relaxation in Middle-Aged Adults. <i>Hypertension</i> , 2013, 61, 296-303.	1.3	106
233	Noninvasive assessment of carotid-femoral pulse wave velocity. <i>Journal of Hypertension</i> , 2013, 31, 946-951.	0.3	24
234	Automated Hexahedral Mesh Generation in a Complex Vascular Tree: The Extended Treemesh Method. , 2013, , .		1

#	ARTICLE	IF	CITATIONS
235	Speeding Up Fluid-Structure Interaction Simulation of the Blood Flow in a Flexible Artery Using Sub-Cycling: Stability and Accuracy. , 2013, , .		1
236	Inverse modelling of image-based patient-specific blood vessels: zero-pressure geometry and <i>in vivo</i> stress incorporation. ESAIM: Mathematical Modelling and Numerical Analysis, 2013, 47, 1059-1075.	0.8	7
237	Evaluation of Alternatives for Dysfunctional Double Lumen Central Venous Catheters Using a Two-Compartmental Mathematical Model for Different Solutes. International Journal of Artificial Organs, 2013, 36, 17-27.	0.7	5
238	The Accuracy of Ultrasound Volume Flow Measurements in the Complex Flow Setting of a Forearm Vascular Access. Journal of Vascular Access, 2013, 14, 281-290.	0.5	20
239	Addition of a Novel, Protective Family History Category Allows Better Profiling of Cardiovascular Risk and Atherosclerotic Burden in the General Population. The Asklepios Study. PLoS ONE, 2013, 8, e63185.	1.1	7
240	Assessment of Carotid Stent Performance: Virtual Tools for a Geometrical Analysis. , 2013, , .		0
241	Electrical Analog Models to Simulate the Impact of Partial Hepatectomy on Hepatic Hemodynamics. , 2013, , .		0
242	No Shorter Telomeres in Subjects With a Family History of Cardiovascular Disease in the Asklepios Study. Arteriosclerosis, Thrombosis, and Vascular Biology, 2012, 32, 3076-3081.	1.1	16
243	Systemic arterial response and ventriculo-arterial interaction during normal pregnancy. American Journal of Hypertension, 2012, 25, 672-677.	1.0	14
244	Arterial Properties as Determinants of Time-Varying Myocardial Stress in Humans. Hypertension, 2012, 60, 64-70.	1.3	88
245	The accuracy of volume flow measurements derived from pulsed wave Doppler: A study in the complex setting of forearm vascular access for hemodialysis. , 2012, , .		1
246	Common Genetic Variation in the β -BCL11B Gene Desert Is Associated With Carotid-Femoral Pulse Wave Velocity and Excess Cardiovascular Disease Risk. Circulation: Cardiovascular Genetics, 2012, 5, 81-90.	5.1	90
247	Slow Extended Nocturnal Home Hemodialysis Shows Superior Adequacy Compared to In-Center Dialysis: A Mathematical Analysis. Blood Purification, 2012, 34, 219-224.	0.9	4
248	Modeling the Human Hepatic Terminal Microcirculation Using 3D Computational Fluid Dynamics. , 2012, , .		1
249	CFD Challenge: Solutions Using an Open-Source Finite Volume Solver, OpenFOAM. , 2012, , .		0
250	CFD Challenge: Solutions Using the Commercial Finite Volume Solver, Fluent, and a pyFormex-Generated Full Hexahedral Mesh. , 2012, , .		0
251	Reservations on the reservoir. Journal of Hypertension, 2012, 30, 676-678.	0.3	24
252	Noninvasive determination of local pulse wave velocity and wave intensity: changes with age and gender in the carotid and femoral arteries of healthy human. Journal of Applied Physiology, 2012, 113, 727-735.	1.2	71

#	ARTICLE	IF	CITATIONS
253	Modeling of Coated Biodegradable Stents. , 2012, , .		0
254	The change in arterial stiffness over the cardiac cycle rather than diastolic stiffness is independently associated with left ventricular mass index in healthy middle-aged individuals. Journal of Hypertension, 2012, 30, 396-402.	0.3	33
255	Assessment of systolic and diastolic arterial stiffness. Journal of Hypertension, 2012, 30, 1489-1491.	0.3	3
256	Response to "Validation of carotid blood pressure assessment by tonometry"™. Journal of Hypertension, 2012, 30, 432.	0.3	0
257	Ambulatory arterial stiffness index does not accurately assess arterial stiffness. Journal of Hypertension, 2012, 30, 574-580.	0.3	36
258	Expert consensus document on the measurement of aortic stiffness in daily practice using carotid-femoral pulse wave velocity. Journal of Hypertension, 2012, 30, 445-448.	0.3	1,440
259	Predicting the Functional Impact of Residual Aortic Coarctation Lesions Using Fluid-Structure Interaction Simulations. , 2012, , .		0
260	Application of a strong FSI coupling scheme for the numerical simulation of bileaflet mechanical heart valve dynamics: study of wall shear stress on the valve leaflets. Progress in Computational Fluid Dynamics, 2012, 12, 68.	0.1	7
261	162 MODELLING OF THE HEPATIC CIRCULATION BY COMBINING VASCULAR CORROSION CASTING AND MICRO-CT IMAGING. Journal of Hepatology, 2012, 56, S71-S72.	1.8	1
262	Perfusion Characteristics of the Human Hepatic Microcirculation Based on Three-Dimensional Reconstructions and Computational Fluid Dynamic Analysis. Journal of Biomechanical Engineering, 2012, 134, 011003.	0.6	76
263	Inverse modelling of an aneurysm's stiffness using surrogate-based optimization and fluid-structure interaction simulations. Structural and Multidisciplinary Optimization, 2012, 46, 457-469.	1.7	7
264	Wave reflection: Myth or reality?. Artery Research, 2012, 6, 7.	0.3	20
265	Arterial Wave Reflections and Incident Cardiovascular Events and Heart Failure. Journal of the American College of Cardiology, 2012, 60, 2170-2177.	1.2	373
266	Modeling the Impact of Partial Hepatectomy on the Hepatic Hemodynamics Using a Rat Model. IEEE Transactions on Biomedical Engineering, 2012, 59, 3293-3303.	2.5	28
267	Vector flow mapping using plane wave ultrasound imaging. , 2012, , .		8
268	The Ghent Marfan Trial " A randomized, double-blind placebo controlled trial with losartan in Marfan patients treated with Î²-blockers. International Journal of Cardiology, 2012, 157, 354-358.	0.8	59
269	Our capricious vessels: The influence of stent design and vessel geometry on the mechanics of intracranial aneurysm stent deployment. Journal of Biomechanics, 2012, 45, 1353-1359.	0.9	66
270	Virtual evaluation of stent graft deployment: A validated modeling and simulation study. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 13, 129-139.	1.5	71

#	ARTICLE	IF	CITATIONS
271	Effect of the degree of LAD stenosis on competitive flow and flow field characteristics in LIMA-to-LAD bypass surgery. <i>Medical and Biological Engineering and Computing</i> , 2012, 50, 839-849.	1.6	22
272	A fast strong coupling algorithm for the partitioned fluid-structure interaction simulation of BMHVs. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2012, 15, 1281-1312.	0.9	17
273	Flow Competition between Hepatic Arterial and Portal Venous flow during Hypothermic Machine Perfusion Preservation of Porcine Livers. <i>International Journal of Artificial Organs</i> , 2012, 35, 119-131.	0.7	16
274	Experimental validation of a pulse wave propagation model for predicting hemodynamics after vascular access surgery. <i>Journal of Biomechanics</i> , 2012, 45, 1684-1691.	0.9	31
275	Muscle-tendon tissue properties in the hypermobility type of Ehlers-Danlos syndrome. <i>Arthritis Care and Research</i> , 2012, 64, 766-772.	1.5	48
276	The upstream boundary condition influences the leaflet opening dynamics in the numerical FSI simulation of an aortic BMHV. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2012, 28, 745-760.	1.0	14
277	On the Use of In Vivo Measured Flow Rates as Boundary Conditions for Image-Based Hemodynamic Models of the Human Aorta: Implications for Indicators of Abnormal Flow. <i>Annals of Biomedical Engineering</i> , 2012, 40, 729-741.	1.3	126
278	Accuracy of Carotid Strain Estimates From Ultrasonic Wall Tracking: A Study Based on Multiphysics Simulations and In Vivo Data. <i>IEEE Transactions on Medical Imaging</i> , 2012, 31, 131-139.	5.4	24
279	Virtual Deployment of Self-Expanding Stents in Aneurysmatic Intracranial Vessels: Do Stent Design and Vessel Geometry Matter?. , 2012, , .		0
280	Finite Element Simulation of the Deployment of Abdominal Aortic Stent Grafts: Validation and Application. , 2012, , .		0
281	Assessing the Accuracy of Non-Invasive Measuring Methods of Pulse Wave Velocity: An Analysis Based on Fluid-Structure Interaction Simulations in the Carotid Artery. , 2012, , .		0
282	Laser Doppler vibrometry for in vivo assessment of arterial stiffness. , 2011, , .		7
283	Clutter filtering issues in speckle tracking for two-dimensional blood velocity estimation. , 2011, , .		0
284	Strain estimation in the carotid artery from ultrasonic wall tracking: A multiphysics model study. , 2011, , .		0
285	Multiphysics modeling in support of ultrasonic image development: Integration of fluid-structure interaction simulations and Field II applied to the carotid artery. , 2011, , .		0
286	The Metabolic Syndrome and Carotid Intima-Media Thickness in Relation to the Parathyroid Hormone to 25-OH-D3 Ratio in a General Population. <i>American Journal of Hypertension</i> , 2011, 24, 102-109.	1.0	43
287	Patient-specific computational haemodynamics: generation of structured and conformal hexahedral meshes from triangulated surfaces of vascular bifurcations. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2011, 14, 797-802.	0.9	27
288	Pulse wave propagation in a model human arterial network: Assessment of 1-D visco-elastic simulations against in vitro measurements. <i>Journal of Biomechanics</i> , 2011, 44, 2250-2258.	0.9	277

#	ARTICLE	IF	CITATIONS
289	P6.02 IN-VIVO ASSESSMENT OF THE ACCURACY OF CAROTID STRAIN ESTIMATES DERIVED FROM ULTRASONIC WALL TRACKING. Artery Research, 2011, 5, 171.	0.3	0
290	P6.16 DETERMINATION OF CAROTID AND FEMORAL WAVE SPEED AND DISTENSIBILITY IN A HEALTHY POPULATION USING A NEW NON-INVASIVE TECHNIQUE. Artery Research, 2011, 5, 176.	0.3	0
291	12.05 AMBULATORY ARTERIAL STIFFNESS INDEX: ANOTHER AMBIGUOUS STIFFNESS INDEX?. Artery Research, 2011, 5, 201.	0.3	0
292	Carotid to femoral pulse wave velocity. Journal of Hypertension, 2011, 29, 1577-1582.	0.3	103
293	Travel distance estimation for carotid femoral pulse wave velocity. Journal of Hypertension, 2011, 29, 2491-2493.	0.3	2
294	Validation of the Arteriograph working principle: questions still remain. Journal of Hypertension, 2011, 29, 619.	0.3	9
295	Validation of the arteriograph working principle. Journal of Hypertension, 2011, 29, 1662-1663.	0.3	3
296	Comparison of central pressure estimates obtained from SphygmoCor, Omron HEM-9000AI and carotid applanation tonometry. Journal of Hypertension, 2011, 29, 1115-1120.	0.3	53
297	Measurement of central aortic pressure. Journal of Hypertension, 2011, 29, 2039-2040.	0.3	0
298	Towards a New Virtual Bench Testing Environment for Stents Assessment. , 2011, , .		0
299	Multiscale Modeling of the Blood Circulation in the Human Liver Using Vascular Corrosion Casting and Micro-CT Imaging Techniques. , 2011, , .		1
300	Modest opposite associations of endogenous testosterone and oestradiol with left ventricular remodelling and function in healthy middle-aged men. Journal of Developmental and Physical Disabilities, 2011, 34, e587-e593.	3.6	10
301	Full-hexahedral structured meshing for image-based computational vascular modeling. Medical Engineering and Physics, 2011, 33, 1318-1325.	0.8	48
302	From Vascular Corrosion Cast to Electrical Analog Model for the Study of Human Liver Hemodynamics and Perfusion. IEEE Transactions on Biomedical Engineering, 2011, 58, 25-35.	2.5	73
303	Replacing Vascular Corrosion Casting by In Vivo Micro-CT Imaging for Building 3D Cardiovascular Models in Mice. Molecular Imaging and Biology, 2011, 13, 78-86.	1.3	40
304	Precision analysis of kinetic modelling estimates in dynamic contrast enhanced MRI. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2011, 24, 51-66.	1.1	18
305	An Integrated Framework to Quantitatively Link Mouse-Specific Hemodynamics to Aneurysm Formation in Angiotensin II-infused ApoE α^{α} mice. Annals of Biomedical Engineering, 2011, 39, 2430-2444.	1.3	43
306	First order correction for T_2^* relaxation in determining contrast agent concentration from spoiled gradient echo pulse sequence signal intensity. Journal of Magnetic Resonance Imaging, 2011, 34, 710-715.	1.9	5

#	ARTICLE	IF	CITATIONS
307	Simultaneous quantification of flow and tissue velocities based on multi-angle plane wave imaging with an extended velocity range. , 2011, , .		2
308	P169 Assessment of variables affecting late left ventricular flow propagation velocity (Vpa): an echocardiographic study. European Journal of Cardiovascular Nursing, 2011, 10, S30.	0.4	0
309	Response to Method Errors or Unexplained Biological Information?. Hypertension, 2011, 57, e9-10.	1.3	3
310	Flip angle optimization for dynamic contrast-enhanced MRI-studies with spoiled gradient echo pulse sequences. Physics in Medicine and Biology, 2011, 56, 5373-5395.	1.6	22
311	A Simulation Tool for Virtual Stent Graft Deployment in Patient-Specific Abdominal Aortic Aneurysms. , 2011, , .		1
312	Ethnic Differences in Arterial Wave Reflections and Normative Equations for Augmentation Index. Hypertension, 2011, 57, 1108-1116.	1.3	95
313	The Impact of Simplified Boundary Conditions and Aortic Arch Inclusion on CFD Simulations in the Mouse Aorta: A Comparison With Mouse-specific Reference Data. Journal of Biomechanical Engineering, 2011, 133, 121006.	0.6	27
314	The Parametrized Diastolic Filling Formalism: Application in the Asklepios Population. , 2011, , .		4
315	Virtual bench testing of new generation coronary stents. EuroIntervention, 2011, 7, 369-376.	1.4	46
316	Structural Simulation of a Mouse-Specific Abdominal Aorta. , 2011, , .		0
317	Noninvasive assessment of central and peripheral arterial pressure (waveforms): implications of calibration methods. Journal of Hypertension, 2010, 28, 300-305.	0.3	67
318	Hemodynamic Impact of Anastomosis Size and Angle in Side-to-End Arteriovenous Fistulae: A Computer Analysis. Journal of Vascular Access, 2010, 11, 52-58.	0.5	55
319	A Novel Simulation Strategy for Stent Insertion and Deployment in Curved Coronary Bifurcations: Comparison of Three Drug-Eluting Stents. Annals of Biomedical Engineering, 2010, 38, 88-99.	1.3	140
320	Numerical Validation of a New Method to Assess Aortic Pulse Wave Velocity from a Single Recording of a Brachial Artery Waveform with an Occluding Cuff. Annals of Biomedical Engineering, 2010, 38, 876-888.	1.3	81
321	Patient-specific computational fluid dynamics: structured mesh generation from coronary angiography. Medical and Biological Engineering and Computing, 2010, 48, 371-380.	1.6	70
322	Simulation of fluidâ€“structure interaction with the interface artificial compressibility method. International Journal for Numerical Methods in Biomedical Engineering, 2010, 26, 276-289.	1.0	44
323	Two-Dimensional Flow Imaging in the Carotid Bifurcation Using a Combined Speckle Tracking and Phase-Shift Estimator: A Study Based on Ultrasound Simulations and in vivo Analysis. Ultrasound in Medicine and Biology, 2010, 36, 1722-1735.	0.7	19
324	Experimental Study of a New Method for Early Detection of Vascular Access Stenoses: Pulse Pressure Analysis at Hemodialysis Needle. Artificial Organs, 2010, 34, 113-117.	1.0	9

#	ARTICLE	IF	CITATIONS
325	Vascular corrosion casting: analyzing wall shear stress in the portal vein and vascular abnormalities in portal hypertensive and cirrhotic rodents. <i>Laboratory Investigation</i> , 2010, 90, 1558-1572.	1.7	32
326	Noninvasive Evaluation of Left Ventricular Afterload. <i>Hypertension</i> , 2010, 56, 563-570.	1.3	169
327	Noninvasive Evaluation of Left Ventricular Afterload. <i>Hypertension</i> , 2010, 56, 555-562.	1.3	120
328	The use of diameter distension waveforms as an alternative for tonometric pressure to assess carotid blood pressure. <i>Physiological Measurement</i> , 2010, 31, 543-553.	1.2	43
329	Left Ventricular Mass. <i>Hypertension</i> , 2010, 56, 91-98.	1.3	218
330	Response to Central Pressure and Pulse Wave Amplification in the Upper Limb. <i>Hypertension</i> , 2010, 55, .	1.3	0
331	A comparison between local wave speed in the carotid and femoral arteries in healthy humans: Application of a new method. , 2010, 2010, 2857-60.		3
332	A simulation environment for validating ultrasonic blood flow and vessel wall imaging based on fluid-structure interaction simulations: Ultrasonic assessment of arterial distension and wall shear rate. <i>Medical Physics</i> , 2010, 37, 4318-4330.	1.6	41
333	Resolving in-vivo flow fields in the systemic circulation of the mouse through combined ultrasound imaging and computational fluid dynamics. , 2010, , .		0
334	A combined speckle tracking and phase-shift estimation approach for 2D blood flow imaging in the carotid bifurcation. , 2010, , .		2
335	Arterial pulsatile hemodynamic load induced by isometric exercise strongly predicts left ventricular mass in hypertension. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2010, 298, H320-H330.	1.5	54
336	Impact of competitive flow on wall shear stress in coronary surgery: computational fluid dynamics of a LIMA-LAD model. <i>Cardiovascular Research</i> , 2010, 88, 512-519.	1.8	82
337	Determinants of pulse wave velocity in healthy people and in the presence of cardiovascular risk factors: "establishing normal and reference values"™. <i>European Heart Journal</i> , 2010, 31, 2338-2350.	1.0	1,637
338	Mechanical Valve Fluid Dynamics and Thrombus Initiation. , 2010, , 437-462.		1
339	ARTERY Society guidelines for validation of non-invasive haemodynamic measurement devices: Part 1, arterial pulse wave velocity. <i>Artery Research</i> , 2010, 4, 34.	0.3	149
340	Arterial waveform and central blood pressure: The complex links between large and small arteries. <i>Artery Research</i> , 2010, 4, 118.	0.3	3
341	P1.06 THE ARTERIOGRAPH: CORRELATED TO AORTIC STIFFNESS, BUT MEASURING AXILLO-BRACHIAL ARTERY STIFFNESS?. <i>Artery Research</i> , 2010, 4, 154.	0.3	0
342	P6.04 EFFECT OF CAROTID BARORECEPTOR ACTIVATION ON AORTIC STIFFNESS. <i>Artery Research</i> , 2010, 4, 166.	0.3	0

#	ARTICLE	IF	CITATIONS
343	P6.06 SYSTEMIC ARTERIAL PROPERTIES DURING NORMAL PREGNANCIES IN HEALTHY WOMEN. Artery Research, 2010, 4, 167.	0.3	0
344	P8.02 LARGE DIFFERENCES IN CENTRAL PRESSURE ESTIMATION BETWEEN SPHYGMOCOR AND OMRON HEM 9000AI. Artery Research, 2010, 4, 169.	0.3	0
345	P11.09 SYSTEMIC ARTERIAL PROPERTIES IN WOMEN 3 YEARS AFTER A PRE-ECLAMPTIC PREGNANCY. Artery Research, 2010, 4, 180.	0.3	0
346	P13.02 VENTRICULO-VASCULAR COUPLING IS IMPAIRED IN PATIENTS WITH TYPE-II-DIABETES MELLITUS AND RESISTANT HYPERTENSION. Artery Research, 2010, 4, 183.	0.3	0
347	8.3 REDUCED SYSTEMIC ARTERIAL COMPLIANCE IN STABLE HEART TRANSPLANT PATIENTS. Artery Research, 2010, 4, 151.	0.3	0
348	Two-dimensional blood velocity estimation with ultrasound: speckle tracking versus crossed-beam vector doppler based on flow simulations in a carotid bifurcation model. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 327-339.	1.7	58
349	Synthetic Vascular Ultrasound Imaging through Coupled Fluid-Structure Interaction and Ultrasound Simulations. IFMBE Proceedings, 2010, , 430-433.	0.2	0
350	A New Hexahedral Mesh for a Numerically Efficient Patient Specific Analysis of Arterial Blood Flow and Wall Shear Stress. , 2010, , .		0
351	Noninvasive Assessment of Diastolic Intraventricular Pressure Gradients in a Large General Population (the Asklepios Study). , 2010, , .		0
352	From Human Liver Vascular Corrosion Cast to Electrical Analog Model of the Hepatic Blood Flow. , 2010, , .		1
353	Arterial Load and Ventricular-Arterial Coupling. Hypertension, 2009, 54, 558-566.	1.3	85
354	The influence of aortic dimensions on calculated wall shear stress in the mouse aortic arch. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 491-499.	0.9	23
355	Time-Varying Myocardial Stress and Systolic Pressure-Stress Relationship. Circulation, 2009, 119, 2798-2807.	1.6	96
356	Role of Pulse Pressure Amplification in Arterial Hypertension. Hypertension, 2009, 54, 375-383.	1.3	457
357	Systemic telomere length and preclinical atherosclerosis: the Asklepios Study. European Heart Journal, 2009, 30, 3074-3081.	1.0	67
358	Amplification of the Pressure Pulse in the Upper Limb in Healthy, Middle-Aged Men and Women. Hypertension, 2009, 54, 414-420.	1.3	177
359	Evaluation of Noninvasive Methods to Assess Wave Reflection and Pulse Transit Time From the Pressure Waveform Alone. Hypertension, 2009, 53, 142-149.	1.3	108
360	Response to Flawed Measurement of Brachial Tonometry for Calculating Aortic Pressure?. Hypertension, 2009, 54, .	1.3	4

#	ARTICLE	IF	CITATIONS
361	Mechanical Properties of the Respiratory System Derived From Morphologic Insight. IEEE Transactions on Biomedical Engineering, 2009, 56, 949-959.	2.5	58
362	Assessment of Numerical Simulation Strategies for Ultrasonic Color Blood Flow Imaging, Based on a Computer and Experimental Model of the Carotid Artery. Annals of Biomedical Engineering, 2009, 37, 2188-2199.	1.3	17
363	The reservoir pressure concept: the 3-element windkessel model revisited? Application to the Asklepios population study. Journal of Engineering Mathematics, 2009, 64, 417-428.	0.6	33
364	Blood pressure waveform analysis by means of wavelet transform. Medical and Biological Engineering and Computing, 2009, 47, 165-173.	1.6	32
365	Nitinol Embolic Protection Filters: Design Investigation by Finite Element Analysis. Journal of Materials Engineering and Performance, 2009, 18, 787-792.	1.2	16
366	Design of an Artificial Left Ventricular Muscle: An Innovative Way to Actuate Blood Pumps?. Artificial Organs, 2009, 33, 464-468.	1.0	3
367	Ultrasound simulation of complex flow velocity fields based on computational fluid dynamics. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 546-556.	1.7	75
368	Assessing arterial distensibility using ultrasound wall-tracking diameter distension. , 2009, , .		1
369	Limitations and pitfalls of non-invasive measurement of arterial pressure wave reflections and pulse wave velocity. Artery Research, 2009, 3, 79.	0.3	79
370	P1.01 PULSE WAVE VELOCITY: HOW TO ASSESS THE DISTANCE?. Artery Research, 2009, 3, 161.	0.3	1
371	P2.01 INITIAL DATA ON THE NATURAL HISTORY OF APWV IN WEST AFRICAN INFANTS. Artery Research, 2009, 3, 177.	0.3	0
372	P9.07 ULTRASOUND MAPPING OF THE SUPERFICIAL VEINS IN HEALTHY SUBJECTS. Artery Research, 2009, 3, 168.	0.3	0
373	8.6 ELECTRICAL CAROTID BARORECEPTOR ACTIVATION LOWERS RENAL ARTERY IMPEDANCE AND STIFFNESS IN AN ACUTE CANINE MODEL. Artery Research, 2009, 3, 160.	0.3	1
374	Parametric Hexahedral Patient-Specific Mesh Generation From Coronary Angiography Using PyFormex. , 2009, , .		0
375	Distance measurements for the assessment of carotid to femoral pulse wave velocity. Journal of Hypertension, 2009, 27, 2377-2385.	0.3	60
376	An Innovative Design of a Blood Pump Actuator Device using an Artificial Left Ventricular Muscle. IFMBE Proceedings, 2009, , 1879-1882.	0.2	0
377	Relation Between Left Ventricular Relaxation Rate and Arterial Loading. IFMBE Proceedings, 2009, , 1918-1921.	0.2	0
378	Visualization and modeling of flow in the embryonic heart. IFMBE Proceedings, 2009, , 1875-1878.	0.2	0

#	ARTICLE	IF	CITATIONS
379	Carotid plaque and its effect on ultrasound carotid distension measurements. IFMBE Proceedings, 2009, , 1914-1917.	0.2	0
380	Effects of Plaque on Carotid Wall Deformation Studied Using a Finite Element Model. , 2009, , .		0
381	Patient-Specific Modelling of Aortic Arch Wall Shear Stress Patterns in Patients With Marfan Syndrome. , 2009, , .		0
382	Finite Element Design of Nitinol Embolic Protection Filters Based on Parametric Modelling With PyFormex: A Feasibility Study. , 2009, , .		0
383	Abstract C128: Protocol optimization for dynamic contrast enhancedâ€MRI in combination with kinetic modeling. , 2009, , .		1
384	Epoprostenol treatment of acute pulmonary hypertension is associated with aâparadoxical decrease in right ventricular contractility. Intensive Care Medicine, 2008, 34, 179-189.	3.9	36
385	Effect of an Abdominal Aortic Aneurysm on Wave Reflection in the Aorta. IEEE Transactions on Biomedical Engineering, 2008, 55, 1602-1611.	2.5	58
386	Identifying the vulnerable plaque: A review of invasive and non-invasive imaging modalities. Artery Research, 2008, 2, 21.	0.3	17
387	Assessment of arterial pressure wave reflection: Methodological considerations. Artery Research, 2008, 2, 122.	0.3	43
388	07.06 LONG TERM ORAL CONTRACEPTIVE USE IS AN INDEPENDENT RISK FACTOR FOR ARTERIAL STIFFENING. Artery Research, 2008, 2, 92.	0.3	0
389	P1.38 CONVERSION BETWEEN DEFINITIONS OF PULSE WAVE VELOCITY. Artery Research, 2008, 2, 101.	0.3	0
390	P1.40 DETERMINATION OF PRESSURE INDEPENDENT ARTERIAL STIFFNESS BY CORRECTING PULSE WAVE VELOCITY FOR PRESSURE-AREA RELATIONSHIP. Artery Research, 2008, 2, 101.	0.3	0
391	P1.51 EFFECTS OF ELECTRICAL BARORECEPTOR STIMULATION ON CENTRAL ARTERIAL HEMODYNAMICS ASSESSED IN A LARGE ANIMAL MODEL. Artery Research, 2008, 2, 104.	0.3	0
392	P2.16 PRESSURE PROFILE ANALYSIS AT HEMODIALYSIS NEEDLE: A NEW METHOD FOR EARLY DETECTION OF VASCULAR ACCESS STENOSES. Artery Research, 2008, 2, 110.	0.3	0
393	P2.21 COMPLEXITY OF 3D CAROTID BIFURCATION BLOOD FLOW PATTERNS IS NOT ADEQUATELY CAPTURED BY CURRENTLY USED ULTRASOUND MODALITIES. Artery Research, 2008, 2, 111.	0.3	0
394	Comparison of scaling techniques for deriving carotid artery pressures from diameter distension waveforms. Computer Methods in Biomechanics and Biomedical Engineering, 2008, 11, 225-227.	0.9	1
395	Determining carotid artery pressure from scaled diameter waveforms: comparison and validation of calibration techniques in 2026 subjects. Physiological Measurement, 2008, 29, 1267-1280.	1.2	67
396	Impact of Radial Artery Pressure Waveform Calibration on Estimated Central Pressure Using a Transfer Function Approach. Hypertension, 2008, 52, e24-5; author reply e26.	1.3	17

#	ARTICLE	IF	CITATIONS
397	Three- and four-element Windkessel models: Assessment of their fitting performance in a large cohort of healthy middle-aged individuals. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2008, 222, 417-428.	1.0	70
398	Computational study on anastomosis size and angle of arterio-venous fistula for hemodialysis. Computer Methods in Biomechanics and Biomedical Engineering, 2008, 11, 219-220.	0.9	0
399	A Noncontact Approach for the Evaluation of Large Artery Stiffness: A Preliminary Study. American Journal of Hypertension, 2008, 21, 1280-1283.	1.0	47
400	Oxidized Low-Density Lipoprotein Cholesterol Is Associated With Decreases in Cardiac Function Independent of Vascular Alterations. Hypertension, 2008, 52, 535-541.	1.3	43
401	A comparison of multidimensional flow estimation techniques using computational fluid dynamics: Speckle tracking versus vector Doppler. , 2008, , .		1
402	Age and gender related patterns in carotid-femoral PWV and carotid and femoral stiffness in a large healthy, middle-aged population. Journal of Hypertension, 2008, 26, 1411-1419.	0.3	123
403	From cardiac to respiratory rate, from cardiac sounds to pulse velocity: a noncontact unified approach for the monitoring of vital signs by means of optical vibrocardiography. , 2008, , .		5
404	Using Flow Waveform Approximations for Aortic Wave Reflection and Pulse Transit Time Assessment: A Critical Evaluation. , 2008, , .		2
405	Comparison of drug-eluting stent cell size using micro-CT: important data for bifurcation stent selection. EuroIntervention, 2008, 4, 391-396.	1.4	41
406	Carotid Plaque and its Effect on Ultrasound Carotid Distension Measurements: An In Vitro Study. , 2008, , .		0
407	Rationale, design, methods and baseline characteristics of the Asklepios Study. European Journal of Cardiovascular Prevention and Rehabilitation, 2007, 14, 179-191.	3.1	146
408	Assessment of pressure wave reflection: getting the timing right!. Physiological Measurement, 2007, 28, 1045-1056.	1.2	106
409	Validation of a new automated IMT measurement algorithm. Journal of Human Hypertension, 2007, 21, 976-978.	1.0	24
410	Noninvasive (Input) Impedance, Pulse Wave Velocity, and Wave Reflection in Healthy Middle-Aged Men and Women. Hypertension, 2007, 49, 1248-1255.	1.3	270
411	Noninvasive assessment of left ventricular and myocardial contractility in middle-aged men and women: disparate evolution above the age of 50?. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H856-H865.	1.5	32
412	Peripheral or central augmentation index: an esoteric question or a non-invasive clue to central haemodynamics?. Journal of Hypertension, 2007, 25, 289-293.	0.3	2
413	The use of a generalized transfer function: different processing, different results!. Journal of Hypertension, 2007, 25, 1783-1787.	0.3	33
414	Effects of an aging vascular model on healthy and diseased hearts. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H1334-H1343.	1.5	9

#	ARTICLE	IF	CITATIONS
415	Plasticity in the Mechanical Behaviour of Cardiovascular Stents during Stent Preparation (Crimping) and Placement (Expansion). <i>Key Engineering Materials</i> , 2007, 340-341, 847-852.	0.4	4
416	Response to Noninvasive Input Impedance of the Human Systemic Circulation. <i>Hypertension</i> , 2007, 50, .	1.3	0
417	Thoracic epidural anesthesia impairs the hemodynamic response to acute pulmonary hypertension by deteriorating right ventricularâ€“pulmonary arterial coupling*. <i>Critical Care Medicine</i> , 2007, 35, 222-229.	0.4	64
418	Levosimendan improves right ventriculovascular coupling in a porcine model of right ventricular dysfunction*. <i>Critical Care Medicine</i> , 2007, 35, 707-715.	0.4	131
419	METHODOLOGICAL CONSIDERATIONS ON MEASURING CENTRAL BLOOD PRESSURE AND WAVE REFLECTION. <i>Artery Research</i> , 2007, 1, 46.	0.3	0
420	P.081 VALIDITY OF THE ONE-THIRD RULE TO CALCULATE MEAN ARTERIAL PRESSURE. <i>Artery Research</i> , 2007, 1, 71.	0.3	0
421	06.07 EVALUATION OF A METHOD OF WAVE REFLECTION ASSESSMENT VIA TRIANGULAR FLOW WAVE APPROXIMATION. <i>Artery Research</i> , 2007, 1, 51.	0.3	0
422	P.018 ABDOMINAL AORTIC ANEURYSMS AND THEIR EFFECT ON ARTERIAL WAVE REFLECTION AND MORPHOLOGY. <i>Artery Research</i> , 2007, 1, 56.	0.3	0
423	New Echocardiographic Applications for Assessing Global Left Ventricular Diastolic Function. <i>Ultrasound in Medicine and Biology</i> , 2007, 33, 823-841.	0.7	22
424	Cardiovascular haemodynamics and ventriculo-arterial coupling in an acute pig model of coronary ischaemia-reperfusion. <i>Experimental Physiology</i> , 2007, 92, 127-137.	0.9	3
425	Telomere length and cardiovascular risk factors in a middleâ€“aged population free of overt cardiovascular disease. <i>Aging Cell</i> , 2007, 6, 639-647.	3.0	309
426	Pulse wave propagation in a model human arterial network: Assessment of 1-D numerical simulations against in vitro measurements. <i>Journal of Biomechanics</i> , 2007, 40, 3476-3486.	0.9	223
427	The Impact of an Abdominal Aortic Aneurysm on Aortic Wave Reflection. , 2007, , .		0
428	140 The effects of an aging vascular model on healthy and diseased hearts. <i>European Journal of Heart Failure</i> , Supplement, 2007, 6, 35-35.	0.2	0
429	Primary impairment of left ventricular function in Marfan syndrome. <i>International Journal of Cardiology</i> , 2006, 112, 353-358.	0.8	108
430	Ventricular-arterial coupling in a rat model of reduced arterial compliance provoked by hypervitaminosis D and nicotine. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006, 291, H1942-H1951.	1.5	28
431	Hemodynamic effects of different lung-protective ventilation strategies in closed-chest pigs with normal lungs. <i>Critical Care Medicine</i> , 2006, 34, 2990-2996.	0.4	42
432	Acute pulmonary hypertension causes depression of left ventricular contractility and relaxation. <i>European Journal of Anaesthesiology</i> , 2006, 23, 824-831.	0.7	21

#	ARTICLE	IF	CITATIONS
433	Hemodynamics of a Pulsatile Left Ventricular Assist Device Driven by a Counterpulsation Pump in a Mock Circulation. <i>Artificial Organs</i> , 2006, 30, 308-312.	1.0	12
434	Hydrodynamic Evaluation of Kangaroo Aortic Valve Matrices for Tissue Valve Engineering. <i>Artificial Organs</i> , 2006, 30, 432-439.	1.0	4
435	Assessment of the Tilting Properties of the Human Mitral Valve during Three Main Phases of the Heart Cycle: An Echocardiographic Study. <i>Echocardiography</i> , 2006, 23, 265-270.	0.3	0
436	Numerical assessment of the impact of a flow wire on its velocity measurements. <i>Ultrasound in Medicine and Biology</i> , 2006, 32, 1025-1036.	0.7	2
437	Evaluation of BM-573, a novel TXA2 synthase inhibitor and receptor antagonist, in a porcine model of myocardial ischemia-reperfusion. <i>Prostaglandins and Other Lipid Mediators</i> , 2006, 79, 53-73.	1.0	3
438	Aortic reflection coefficients and their association with global indexes of wave reflection in healthy controls and patients with Marfan's syndrome. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006, 290, H2385-H2392.	1.5	48
439	Nonlinear isochrones in murine left ventricular pressure-volume loops: how well does the time-varying elastance concept hold?. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006, 290, H1474-H1483.	1.5	33
440	Noninvasive Doppler-derived myocardial performance index in rats with myocardial infarction: validation and correlation by conductance catheter. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006, 290, H1540-H1548.	1.5	40
441	Single-Beat Evaluation of Right Ventricular Contractility. <i>Critical Care Medicine</i> , 2005, 33, 918.	0.4	0
442	Echocardiographic assessment of aortic elastic properties with automated border detection in an ICU: in vivo application of the arctangent Langewouters model. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2005, 288, H2504-H2511.	1.5	29
443	Conductance catheter-based assessment of arterial input impedance, arterial function, and ventricular-vascular interaction in mice. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2005, 288, H1157-H1164.	1.5	51
444	Noninvasive Assessment of Local Pulse Pressure. <i>Hypertension</i> , 2005, 46, 244-248.	1.3	163
445	Wave Intensity Analysis of Left Ventricular Filling. <i>Journal of Biomechanical Engineering</i> , 2005, 127, 862-867.	0.6	3
446	Characterization of an original model of myocardial infarction provoked by coronary artery thrombosis induced by ferric chloride in pig. <i>Thrombosis Research</i> , 2005, 116, 431-442.	0.8	21
447	Carotid Tonometry Versus Synthesized Aorta Pressure Waves for the Estimation of Central Systolic Blood Pressure and Augmentation Index. <i>American Journal of Hypertension</i> , 2005, 18, 1168-1173.	1.0	78
448	Predicting ATS Open Pivot heart valve performance with computational fluid dynamics. <i>Journal of Heart Valve Disease</i> , 2005, 14, 393-9.	0.5	16
449	Effect of BM-573 [N-Terbutyl-N ^ε -[2-(4-methylphenylamino)-5-nitro-benzenesulfonyl]urea], a Dual Thromboxane Synthase Inhibitor and Thromboxane Receptor Antagonist, in a Porcine Model of Acute Pulmonary Embolism. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2004, 310, 964-972.	1.3	34
450	In vitro assessment of the unloading and perfusion capacities of the PUCA II and the IABP. <i>Perfusion (United Kingdom)</i> , 2004, 19, 25-32.	0.5	11

#	ARTICLE	IF	CITATIONS
451	Pharmacological Characterization of N-tert-Butyl-N-[2-(4-methylphenylamino)-5-nitrobenzenesulfonyl]urea (BM-573), a Novel Thromboxane A2 Receptor Antagonist and Thromboxane Synthase Inhibitor in a Rat Model of Arterial Thrombosis and Its Effects on Bleeding Time. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2004, 309, 498-505.	1.3	28
452	Comparison between single-beat and multiple-beat methods for estimation of right ventricular contractility. <i>Critical Care Medicine</i> , 2004, 32, 1886-1890.	0.4	26
453	Effect of a Novel Thromboxane A2 Inhibitor on Right Ventricular-Arterial Coupling in Endotoxic Shock. <i>Shock</i> , 2004, 21, 45-51.	1.0	12
454	Functional analysis of the common carotid artery. <i>Journal of Hypertension</i> , 2004, 22, 973-981.	0.3	44
455	ASSESSMENT OF CENTRAL PULSE PRESSURE. <i>Journal of Hypertension</i> , 2004, 22, S280.	0.3	0
456	Systemic and pulmonary hemodynamics assessed with a lumped-parameter heart-arterial interaction model. <i>Journal of Engineering Mathematics</i> , 2003, 47, 185-199.	0.6	57
457	Single-center evaluation of the INNO-LiPA HBV genotyping, a reverse hybridization assay for the detection of HBV genotypes A-G. <i>Journal of Hepatology</i> , 2003, 38, 179.	1.8	0
458	Effects of endotoxic shock on right ventricular systolic function and mechanical efficiency. <i>Cardiovascular Research</i> , 2003, 59, 412-418.	1.8	55
459	Effects of levosimendan on right ventricular function and ventriculovascular coupling in open chest pigs*. <i>Critical Care Medicine</i> , 2003, 31, 2339-2343.	0.4	98
460	In Vitro Evaluation of the PUCA II Intra-Arterial LVAD. <i>International Journal of Artificial Organs</i> , 2003, 26, 743-752.	0.7	8
461	Relation of effective arterial elastance to arterial system properties. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2002, 282, H1041-H1046.	1.5	126
462	Effects of vasopressin on right ventricular function in an experimental model of acute pulmonary hypertension*. <i>Critical Care Medicine</i> , 2002, 30, 2548-2552.	0.4	108
463	The role of whole blood viscosity in premature coronary artery disease in women. <i>Atherosclerosis</i> , 2002, 165, 367-373.	0.4	23
464	Arterial elastance and heart-arterial coupling in aortic regurgitation are determined by aortic leak severity. <i>American Heart Journal</i> , 2002, 144, 568-576.	1.2	5
465	Arterial elastance and heart-arterial coupling in aortic regurgitation are determined by aortic leak severity. <i>American Heart Journal</i> , 2002, 144, 568-576.	1.2	8
466	Design of a New Pulsatile Bioreactor for Tissue Engineered Aortic Heart Valve Formation. <i>Artificial Organs</i> , 2002, 26, 710-714.	1.0	78
467	Effect of Rotary Blood Pump Failure on Left Ventricular Energetics Assessed by Mathematical Modeling. <i>Artificial Organs</i> , 2002, 26, 1032-1039.	1.0	24
468	Principles of Vascular Physiology. , 2002, , 116-137.		12

#	ARTICLE	IF	CITATIONS
469	Fixed region of nondistensibility after coarctation repair: In vitro validation of its influence on Doppler peak velocities. <i>Journal of the American Society of Echocardiography</i> , 2001, 14, 580-587.	1.2	12
470	Hydrodynamic Characterisation of Ventricular Assist Devices. <i>International Journal of Artificial Organs</i> , 2001, 24, 470-477.	0.7	23
471	Predicting systolic and diastolic aortic blood pressure and stroke volume in the intact sheep. <i>Journal of Biomechanics</i> , 2001, 34, 41-50.	0.9	39
472	Limitations of Doppler echocardiography for the post-operative evaluation of aortic coarctation. <i>Journal of Biomechanics</i> , 2001, 34, 951-960.	0.9	32
473	Peripheral "Oscillatory" Compliance Is Associated With Aortic Augmentation Index. <i>Hypertension</i> , 2001, 37, 1434-1439.	1.3	82
474	Role of tapering in aortic wave reflection: hydraulic and mathematical model study. <i>Journal of Biomechanics</i> , 2000, 33, 299-306.	0.9	75
475	Left ventricular wall stress normalization in chronic pressure-overloaded heart: a mathematical model study. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2000, 279, H1120-H1127.	1.5	27
476	Quantification of the Contribution of Cardiac and Arterial Remodeling to Hypertension. <i>Hypertension</i> , 2000, 36, 760-765.	1.3	87
477	A non-invasive cardiovascular index for the quantification of arterial load. <i>Acta Cardiologica</i> , 2000, 55, 79-85.	0.3	1
478	Pulmonary arterial compliance in dogs and pigs: the three-element windkessel model revisited. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1999, 277, H725-H731.	1.5	43
479	Use of pulse pressure method for estimating total arterial compliance in vivo. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1999, 276, H424-H428.	1.5	133
480	Pulse Pressure Method and the Area Method for the Estimation of Total Arterial Compliance in Dogs: Sensitivity to Wave Reflection Intensity. <i>Annals of Biomedical Engineering</i> , 1999, 27, 480-485.	1.3	54
481	Quantification of Mitral Regurgitation by the Automated Cardiac Output Method: An In Vitro and In Vivo Study. <i>Journal of the American Society of Echocardiography</i> , 1998, 11, 643-651.	1.2	8
482	In vivo validation of a fluid dynamics model of mitral valve M-mode echocardiogram. <i>Medical and Biological Engineering and Computing</i> , 1996, 34, 192-198.	1.6	2
483	Vessel wall tracking based on the modified autocorrelation estimator. , 0, , .		1