

Patrick Segers

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

391
papers

14,203
citations

57
h-index

104
g-index

507
ext. papers

16,612
ext. citations

3.5
avg, IF

6.74
L-index

#	Paper	IF	Citations
391	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, 2338-50	9.5	1257
390	Expert consensus document on the measurement of aortic stiffness in daily practice using carotid-femoral pulse wave velocity. <i>Journal of Hypertension</i> , 2012 , 30, 445-8	1.9	1089
389	Role of pulse pressure amplification in arterial hypertension: experts' opinion and review of the data. <i>Hypertension</i> , 2009 , 54, 375-83	8.5	375
388	Arterial wave reflections and incident cardiovascular events and heart failure: MESA (Multiethnic Study of Atherosclerosis). <i>Journal of the American College of Cardiology</i> , 2012 , 60, 2170-7	15.1	303
387	Vascular Smooth Muscle Cells and Arterial Stiffening: Relevance in Development, Aging, and Disease. <i>Physiological Reviews</i> , 2017 , 97, 1555-1617	47.9	272
386	Telomere length and cardiovascular risk factors in a middle-aged population free of overt cardiovascular disease. <i>Aging Cell</i> , 2007 , 6, 639-47	9.9	260
385	Noninvasive (input) impedance, pulse wave velocity, and wave reflection in healthy middle-aged men and women. <i>Hypertension</i> , 2007 , 49, 1248-55	8.5	226
384	Large-Artery Stiffness in Health and Disease: JACC State-of-the-Art Review. <i>Journal of the American College of Cardiology</i> , 2019 , 74, 1237-1263	15.1	215
383	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). <i>Journal of the American Society of Echocardiography</i> , 2015 , 28, 727-54	5.8	198
382	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, 2250-8	2.9	194
381	Reference intervals for common carotid intima-media thickness measured with echotracking: relation with risk factors. <i>European Heart Journal</i> , 2013 , 34, 2368-80	9.5	178
380	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, 3476-86	2.9	177
379	Left ventricular mass: allometric scaling, normative values, effect of obesity, and prognostic performance. <i>Hypertension</i> , 2010 , 56, 91-8	8.5	167
378	Amplification of the pressure pulse in the upper limb in healthy, middle-aged men and women. <i>Hypertension</i> , 2009 , 54, 414-20	8.5	157
377	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) <i>European Heart Journal Cardiovascular Imaging</i> , 2015 , 16, 577-605	4.1	146
376	Noninvasive assessment of local pulse pressure: importance of brachial-to-radial pressure amplification. <i>Hypertension</i> , 2005 , 46, 244-8	8.5	145
375	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	9.5	126

374	Rationale, design, methods and baseline characteristics of the Asklepios Study. <i>European Journal of Cardiovascular Prevention and Rehabilitation</i> , 2007 , 14, 179-91		124
373	A novel simulation strategy for stent insertion and deployment in curved coronary bifurcations: comparison of three drug-eluting stents. <i>Annals of Biomedical Engineering</i> , 2010 , 38, 88-99	4.7	121
372	Noninvasive evaluation of left ventricular afterload: part 2: arterial pressure-flow and pressure-volume relations in humans. <i>Hypertension</i> , 2010 , 56, 563-70	8.5	119
371	ARTERY Society guidelines for validation of non-invasive haemodynamic measurement devices: Part 1, arterial pulse wave velocity. <i>Artery Research</i> , 2010 , 4, 34	2.2	117
370	Levosimendan improves right ventriculovascular coupling in a porcine model of right ventricular dysfunction. <i>Critical Care Medicine</i> , 2007 , 35, 707-15	1.4	110
369	Age and gender related patterns in carotid-femoral PWV and carotid and femoral stiffness in a large healthy, middle-aged population. <i>Journal of Hypertension</i> , 2008 , 26, 1411-9	1.9	106
368	Relation of effective arterial elastance to arterial system properties. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2002 , 282, H1041-6	5.2	99
367	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, 729-41	4.7	96
366	Use of pulse pressure method for estimating total arterial compliance in vivo. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1999 , 276, H424-8	5.2	96
365	Primary impairment of left ventricular function in Marfan syndrome. <i>International Journal of Cardiology</i> , 2006 , 112, 353-8	3.2	95
364	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	2.1	92
363	Effects of vasopressin on right ventricular function in an experimental model of acute pulmonary hypertension. <i>Critical Care Medicine</i> , 2002 , 30, 2548-52	1.4	90
362	Carotid to femoral pulse wave velocity: a comparison of real travelled aortic path lengths determined by MRI and superficial measurements. <i>Journal of Hypertension</i> , 2011 , 29, 1577-82	1.9	86
361	Noninvasive evaluation of left ventricular afterload: part 1: pressure and flow measurements and basic principles of wave conduction and reflection. <i>Hypertension</i> , 2010 , 56, 555-62	8.5	86
360	Evaluation of noninvasive methods to assess wave reflection and pulse transit time from the pressure waveform alone. <i>Hypertension</i> , 2009 , 53, 142-9	8.5	86
359	Ethnic differences in arterial wave reflections and normative equations for augmentation index. <i>Hypertension</i> , 2011 , 57, 1108-16	8.5	85
358	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, 727-38	3.2	82
357	Early and late systolic wall stress differentially relate to myocardial contraction and relaxation in middle-aged adults: the Asklepios study. <i>Hypertension</i> , 2013 , 61, 296-303	8.5	82

356	Assessment of pressure wave reflection: getting the timing right!. <i>Physiological Measurement</i> , 2007 , 28, 1045-56	2.9	80
355	Time-varying myocardial stress and systolic pressure-stress relationship: role in myocardial-arterial coupling in hypertension. <i>Circulation</i> , 2009 , 119, 2798-807	16.7	79
354	Effects of levosimendan on right ventricular function and ventriculovascular coupling in open chest pigs. <i>Critical Care Medicine</i> , 2003 , 31, 2339-43	1.4	78
353	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	2.4	76
352	Common genetic variation in the 3'-BCL11B gene desert is associated with carotid-femoral pulse wave velocity and excess cardiovascular disease risk: the AortaGen Consortium. <i>Circulation: Cardiovascular Genetics</i> , 2012 , 5, 81-90		76
351	Peripheral "oscillatory" compliance is associated with aortic augmentation index. <i>Hypertension</i> , 2001 , 37, 1434-9	8.5	75
350	Quantification of the contribution of cardiac and arterial remodeling to hypertension. <i>Hypertension</i> , 2000 , 36, 760-5	8.5	73
349	Arterial load and ventricular-arterial coupling: physiologic relations with body size and effect of obesity. <i>Hypertension</i> , 2009 , 54, 558-66	8.5	72
348	Reference values for local arterial stiffness. Part A: carotid artery. <i>Journal of Hypertension</i> , 2015 , 33, 1981-96	9.6	71
347	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. <i>Annals of Biomedical Engineering</i> , 2010 , 38, 876-88	4.7	69
346	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, 512-9	9.9	68
345	Arterial properties as determinants of time-varying myocardial stress in humans. <i>Hypertension</i> , 2012 , 60, 64-70	8.5	68
344	Design of a new pulsatile bioreactor for tissue engineered aortic heart valve formation. <i>Artificial Organs</i> , 2002 , 26, 710-4	2.6	68
343	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, 1168-73	2.3	66
342	Role of tapering in aortic wave reflection: hydraulic and mathematical model study. <i>Journal of Biomechanics</i> , 2000 , 33, 299-306	2.9	62
341	Perfusion characteristics of the human hepatic microcirculation based on three-dimensional reconstructions and computational fluid dynamic analysis. <i>Journal of Biomechanical Engineering</i> , 2012 , 134, 011003	2.1	61
340	Limitations and pitfalls of non-invasive measurement of arterial pressure wave reflections and pulse wave velocity. <i>Artery Research</i> , 2009 , 3, 79	2.2	61
339	Noninvasive determination of local pulse wave velocity and wave intensity: changes with age and gender in the carotid and femoral arteries of healthy human. <i>Journal of Applied Physiology</i> , 2012 , 113, 727-35	3.7	60

338	Reflection magnitude as a predictor of mortality: the Multi-Ethnic Study of Atherosclerosis. <i>Hypertension</i> , 2014 , 64, 958-64	8.5	57
337	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, 509-17	2.9	57
336	From vascular corrosion cast to electrical analog model for the study of human liver hemodynamics and perfusion. <i>IEEE Transactions on Biomedical Engineering</i> , 2011 , 58, 25-35	5	57
335	Noninvasive assessment of central and peripheral arterial pressure (waveforms): implications of calibration methods. <i>Journal of Hypertension</i> , 2010 , 28, 300-5	1.9	57
334	Wave Separation, Wave Intensity, the Reservoir-Wave Concept, and the Instantaneous Wave-Free Ratio: Presumptions and Principles. <i>Hypertension</i> , 2015 , 66, 93-8	8.5	56
333	Central pulse pressure and its hemodynamic determinants in middle-aged adults with impaired fasting glucose and diabetes: the Asklepios study. <i>Diabetes Care</i> , 2013 , 36, 2359-65	14.6	56
332	Patient-specific computational fluid dynamics: structured mesh generation from coronary angiography. <i>Medical and Biological Engineering and Computing</i> , 2010 , 48, 371-80	3.1	56
331	Resistive and pulsatile arterial load as predictors of left ventricular mass and geometry: the multi-ethnic study of atherosclerosis. <i>Hypertension</i> , 2015 , 65, 85-92	8.5	55
330	Determining carotid artery pressure from scaled diameter waveforms: comparison and validation of calibration techniques in 2026 subjects. <i>Physiological Measurement</i> , 2008 , 29, 1267-80	2.9	55
329	Virtual evaluation of stent graft deployment: a validated modeling and simulation study. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012 , 13, 129-39	4.1	52
328	Three- and four-element Windkessel models: assessment of their fitting performance in a large cohort of healthy middle-aged individuals. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2008 , 222, 417-28	1.7	52
327	The Ghent Marfan Trial--a randomized, double-blind placebo controlled trial with losartan in Marfan patients treated with β blockers. <i>International Journal of Cardiology</i> , 2012 , 157, 354-8	3.2	51
326	Distance measurements for the assessment of carotid to femoral pulse wave velocity. <i>Journal of Hypertension</i> , 2009 , 27, 2377-85	1.9	51
325	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, 1044-52	3.1	51
324	Angiotensin II infusion into ApoE ^{-/-} mice: a model for aortic dissection rather than abdominal aortic aneurysm?. <i>Cardiovascular Research</i> , 2017 , 113, 1230-1242	9.9	50
323	Noninvasive pulmonary artery wave intensity analysis in pulmonary hypertension. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2015 , 308, H1603-11	5.2	50
322	Our capricious vessels: The influence of stent design and vessel geometry on the mechanics of intracranial aneurysm stent deployment. <i>Journal of Biomechanics</i> , 2012 , 45, 1353-9	2.9	50
321	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, H320-30	5.2	50

320	Mechanical properties of the respiratory system derived from morphologic insight. <i>IEEE Transactions on Biomedical Engineering</i> , 2009 , 56, 949-59	5	50
319	Abnormal Wave Reflections and Left Ventricular Hypertrophy Late After Coarctation of the Aorta Repair. <i>Hypertension</i> , 2017 , 69, 501-509	8.5	49
318	Dissecting abdominal aortic aneurysm in Ang II-infused mice: suprarenal branch ruptures and apparent luminal dilatation. <i>Cardiovascular Research</i> , 2015 , 105, 213-22	9.9	49
317	Effects of endotoxic shock on right ventricular systolic function and mechanical efficiency. <i>Cardiovascular Research</i> , 2003 , 59, 412-8	9.9	49
316	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. <i>Circulation: Cardiovascular Interventions</i> , 2018 , 11, e005344	6	48
315	Comparison of central pressure estimates obtained from SphygmoCor, Omron HEM-9000AI and carotid applanation tonometry. <i>Journal of Hypertension</i> , 2011 , 29, 1115-20	1.9	48
314	Systemic telomere length and preclinical atherosclerosis: the Asklepios Study. <i>European Heart Journal</i> , 2009 , 30, 3074-81	9.5	48
313	Ultrasound simulation of complex flow velocity fields based on computational fluid dynamics. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2009 , 56, 546-56	3.2	48
312	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, 480-5	4.7	48
311	Thoracic epidural anesthesia impairs the hemodynamic response to acute pulmonary hypertension by deteriorating right ventricular-pulmonary arterial coupling. <i>Critical Care Medicine</i> , 2007 , 35, 222-9	1.4	47
310	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, H1157-64	5.2	47
309	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,	6	46
308	Ascending Aortic Aneurysm in Angiotensin II-Infused Mice: Formation, Progression, and the Role of Focal Dissections. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2016 , 36, 673-81	9.4	45
307	Hemodynamic impact of anastomosis size and angle in side-to-end arteriovenous fistulae: a computer analysis. <i>Journal of Vascular Access</i> , 2010 , 11, 52-8	1.8	45
306	Systemic and pulmonary hemodynamics assessed with a lumped-parameter heart-arterial interaction model. <i>Journal of Engineering Mathematics</i> , 2003 , 47, 185-199	1.2	45
305	Effect of an abdominal aortic aneurysm on wave reflection in the aorta. <i>IEEE Transactions on Biomedical Engineering</i> , 2008 , 55, 1602-11	5	44
304	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	3.7	44
303	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, 847-61	2.9	43

302	Two-dimensional blood velocity estimation with ultrasound: speckle tracking versus crossed-beam vector Doppler based on flow simulations in a carotid bifurcation model. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2010 , 57, 327-39	3.2	43
301	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, H2385-92	5.2	43
300	Mathematical modeling of intraperitoneal drug delivery: simulation of drug distribution in a single tumor nodule. <i>Drug Delivery</i> , 2017 , 24, 491-501	7	41
299	Reference values for local arterial stiffness. Part B: femoral artery. <i>Journal of Hypertension</i> , 2015 , 33, 1997-2009	1.9	41
298	Virtual bench testing of new generation coronary stents. <i>EuroIntervention</i> , 2011 , 7, 369-76	3.1	41
297	How to Measure Arterial Stiffness in Humans. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2020 , 40, 1034-1043	9.4	41
296	A finite element strategy to investigate the free expansion behaviour of a biodegradable polymeric stent. <i>Journal of Biomechanics</i> , 2015 , 48, 2012-8	2.9	40
295	An integrated framework to quantitatively link mouse-specific hemodynamics to aneurysm formation in angiotensin II-infused ApoE -/- mice. <i>Annals of Biomedical Engineering</i> , 2011 , 39, 2430-44	4.7	40
294	A noncontact approach for the evaluation of large artery stiffness: a preliminary study. <i>American Journal of Hypertension</i> , 2008 , 21, 1280-3	2.3	40
293	Provisional stenting of coronary bifurcations: insights into final kissing balloon post-dilation and stent design by computational modeling. <i>JACC: Cardiovascular Interventions</i> , 2014 , 7, 325-33	5	39
292	The metabolic syndrome and carotid intima-media thickness in relation to the parathyroid hormone to 25-OH-D(3) ratio in a general population. <i>American Journal of Hypertension</i> , 2011 , 24, 102-9	2.3	39
291	Comparison of drug-eluting stent cell size using micro-CT: important data for bifurcation stent selection. <i>EuroIntervention</i> , 2008 , 4, 391-6	3.1	39
290	Simulation of fluid-structure interaction with the interface artificial compressibility method. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2010 , 26, 276-289	2.6	38
289	Characterization of cardiovascular involvement in pseudoxanthoma elasticum families. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2013 , 33, 2646-52	9.4	37
288	Full-hexahedral structured meshing for image-based computational vascular modeling. <i>Medical Engineering and Physics</i> , 2011 , 33, 1318-25	2.4	37
287	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, H1540-8	5.2	37
286	Functional analysis of the common carotid artery: relative distension differences over the vessel wall measured in vivo. <i>Journal of Hypertension</i> , 2004 , 22, 973-81	1.9	37
285	Replacing vascular corrosion casting by in vivo micro-CT imaging for building 3D cardiovascular models in mice. <i>Molecular Imaging and Biology</i> , 2011 , 13, 78-86	3.8	36

284	Oxidized low-density lipoprotein cholesterol is associated with decreases in cardiac function independent of vascular alterations. <i>Hypertension</i> , 2008 , 52, 535-41	8.5	36
283	Hemodynamic effects of different lung-protective ventilation strategies in closed-chest pigs with normal lungs. <i>Critical Care Medicine</i> , 2006 , 34, 2990-6	1.4	36
282	Using machine learning to characterize heart failure across the scales. <i>Biomechanics and Modeling in Mechanobiology</i> , 2019 , 18, 1987-2001	3.8	34
281	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, 256-63	3.2	34
280	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, 1295-310	2.1	34
279	The use of diameter distension waveforms as an alternative for tonometric pressure to assess carotid blood pressure. <i>Physiological Measurement</i> , 2010 , 31, 543-53	2.9	34
278	Assessment of arterial pressure wave reflection: Methodological considerations. <i>Artery Research</i> , 2008 , 2, 122	2.2	34
277	Predicting systolic and diastolic aortic blood pressure and stroke volume in the intact sheep. <i>Journal of Biomechanics</i> , 2001 , 34, 41-50	2.9	34
276	A computational exploration of helical arterio-venous graft designs. <i>Journal of Biomechanics</i> , 2013 , 46, 345-53	2.9	33
275	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, 549-56	2.3	33
274	Effective arterial elastance is insensitive to pulsatile arterial load. <i>Hypertension</i> , 2014 , 64, 1022-31	8.5	32
273	Muscle-tendon tissue properties in the hypermobility type of Ehlers-Danlos syndrome. <i>Arthritis Care and Research</i> , 2012 , 64, 766-72	4.7	32
272	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, 1567-78	4.7	31
271	Late systolic central hypertension as a predictor of incident heart failure: the Multi-ethnic Study of Atherosclerosis. <i>Journal of the American Heart Association</i> , 2015 , 4, e001335	6	31
270	Impaired cardiovascular structure and function in adult survivors of severe acute malnutrition. <i>Hypertension</i> , 2014 , 64, 664-71	8.5	31
269	On-chip laser Doppler vibrometer for arterial pulse wave velocity measurement. <i>Biomedical Optics Express</i> , 2013 , 4, 1229-35	3.5	31
268	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, 4318-30	4.4	31
267	Ambulatory arterial stiffness index does not accurately assess arterial stiffness. <i>Journal of Hypertension</i> , 2012 , 30, 574-80	1.9	30

266	Epoprostenol treatment of acute pulmonary hypertension is associated with a paradoxical decrease in right ventricular contractility. <i>Intensive Care Medicine</i> , 2008 , 34, 179-89	14.5	30
265	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, H725-31	5.2	30
264	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,	6	30
263	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, 75-80	2.2	29
262	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	12.3	28
261	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	6	28
260	Experimental validation of a pulse wave propagation model for predicting hemodynamics after vascular access surgery. <i>Journal of Biomechanics</i> , 2012 , 45, 1684-91	2.9	28
259	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, 1558-72	5.9	28
258	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. <i>Journal of Hypertension</i> , 2012 , 30, 396-402	1.9	28
257	The reservoir pressure concept: the 3-element windkessel model revisited? Application to the Asklepios population study. <i>Journal of Engineering Mathematics</i> , 2009 , 64, 417-428	1.2	27
256	Noninvasive assessment of left ventricular and myocardial contractility in middle-aged men and women: disparate evolution above the age of 50?. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007 , 292, H856-65	5.2	27
255	Effect of BM-573 [N-terbutyl-N'-[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, 964-72	4.7	27
254	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	4.7	27
253	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, H2504-11	5.2	27
252	Limitations of Doppler echocardiography for the post-operative evaluation of aortic coarctation. <i>Journal of Biomechanics</i> , 2001 , 34, 951-60	2.9	27
251	Non-invasive, energy-based assessment of patient-specific material properties of arterial tissue. <i>Biomechanics and Modeling in Mechanobiology</i> , 2015 , 14, 1045-56	3.8	26
250	The use of a generalized transfer function: different processing, different results!. <i>Journal of Hypertension</i> , 2007 , 25, 1783-7	1.9	26
249	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, H1942-51	5.2	26

248	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,	6	25
247	Filling the void: a coalescent numerical and experimental technique to determine aortic stent graft mechanics. <i>Journal of Biomechanics</i> , 2013 , 46, 2477-82	2.9	24
246	Assessment of shear stress related parameters in the carotid bifurcation using mouse-specific FSI simulations. <i>Journal of Biomechanics</i> , 2016 , 49, 2135-2142	2.9	23
245	Modeling the impact of partial hepatectomy on the hepatic hemodynamics using a rat model. <i>IEEE Transactions on Biomedical Engineering</i> , 2012 , 59, 3293-303	5	23
244	Blood pressure waveform analysis by means of wavelet transform. <i>Medical and Biological Engineering and Computing</i> , 2009 , 47, 165-73	3.1	23
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