BerendÂ E Westerhof

List of Publications by Year
in descending order

75 papers	4,264 citations	236925 25 h-index	114465 63 g-index
75 all docs	75 docs citations	75 times ranked	4924 citing authors

#	Article	IF	Citations
1	Central-to-peripheral stiffness gradients determine diastolic pressure and flow fluctuation waveforms: time domain analysis of femoral artery pulse. Journal of Hypertension, 2022, 40, 338-347.	0.5	3
2	Right atrial function is associated with right venticular diastolic stiffness: RAâ€“RV interaction in pulmonary arterial hypertension. European Respiratory Journal, 2022, 59, 2101454.	6.7	15
3	Interplay of sex hormones and long-term right ventricular adaptation in a Dutch PAH-cohort. Journal of Heart and Lung Transplantation, 2022, 41, 445-457.	0.6	12
4	Pulmonary arterial load and ventricularâ€“arterial coupling in pulmonary hypertension. , 2022, , 899-915.		0
5	When right ventricular pressure meets volume: The impact of arrival time of reflected waves on right ventricle load in pulmonary arterial hypertension. Journal of Physiology, 2022, 600, 2327-2344.	2.9	9
6	Distinct morphologies of arterial waveforms reveal preloadâ€, contractilityâ€, and afterloadâ€deficient hemodynamic instability: An in silico simulation study. Physiological Reports, 2022, 10, e15242.	1.7	4
7	Reply from Masafumi Fukumitsu, Anton Vonk Noordegraaf and Berend E. Westerhof. Journal of Physiology, 2022, 600, 3635-3635.	2.9	0
8	Identifying Isolated Systolic Hypertension From Upper-Arm Cuff Blood Pressure Compared With Invasive Measurements. Hypertension, 2021, 77, 632-639.	2.7	4
9	Lower complexity and higher variability in beatâ€toâ€beat systolic blood pressure are associated with elevated longâ€term risk of dementia: The Rotterdam Study. Alzheimer's and Dementia, 2021, 17, 1134-1144.	0.8	13
10	Central Hypovolemia Detection During Environmental Stressâ€"A Role for Artificial Intelligence?. Frontiers in Physiology, 2021, 12, 784413.	2.8	1
11	Bisoprolol therapy does not reduce right ventricular sympathetic activity in pulmonary arterial hypertension patients. Pulmonary Circulation, 2020, 10, 1-9.	1.7	10
12	Early return of reflected waves increases right ventricular wall stress in chronic thromboembolic pulmonary hypertension. American Journal of Physiology - Heart and Circulatory Physiology, 2020, 319, H1438-H1450.	3.2	18
13	Pressure and Flow Relations in the Systemic Arterial Tree Throughout Development From Newborn to Adult. Frontiers in Pediatrics, 2020, 8, 251.	1.9	9
14	Estimation of Intraglomerular Pressure Using Invasive Renal Arterial Pressure and Flow Velocity Measurements in Humans. Journal of the American Society of Nephrology: JASN, 2020, 31, 1905-1914.	6.1	7
15	Influence of Age on Upper Arm Cuff Blood Pressure Measurement. Hypertension, 2020, 75, 844-850.	2.7	27
16	Conduit arterial wave reflection promotes pressure transmission but impedes hydraulic energy transmission to the microvasculature. American Journal of Physiology - Heart and Circulatory Physiology, 2020, 319, H66-H75.	3.2	13
17	Vena cava backflow and right ventricular stiffness in pulmonary arterial hypertension. European Respiratory Journal, 2019, 54, 1900625.	6.7	25
18	Right Ventricular Load and Function in Chronic Thromboembolic Pulmonary Hypertension: Differences between Proximal and Distal Chronic Thromboembolic Pulmonary Hypertension. American Journal of Respiratory and Critical Care Medicine, 2019, 199, 1163-1166.	5.6	9

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19	Cardiac remodeling in aortic and mitral valve disease: a simulation study with clinical validation. Journal of Applied Physiology, 2019, 126, 1377-1389.	2.5	11
20	The right treatment for the right ventricle. Current Opinion in Pulmonary Medicine, 2019, 25, 410-417.	2.6	15
21	Snapshots of Hemodynamics. , 2019, , .		44
22	Application of the wave-reservoir approach to different aortic sites. Journal of Hypertension, 2018, 36, 963-964.	0.5	2
23	The success of pulmonary hypertension treatment: improved cardiac function by reducing the arterial load. Pulmonary Circulation, 2018, 8, 1-2.	1.7	0
24	Accuracy of oscillometric blood pressure measurement in atrial fibrillation. Blood Pressure Monitoring, 2018, 23, 59-63.	0.8	11
25	Myocardial preload alters central pressure augmentation through changes in the forward wave. Journal of Hypertension, 2018, 36, 544-551.	0.5	8
26	Detecting central hypovolemia in simulated hypovolemic shock by automated feature extraction with principal component analysis. Physiological Reports, 2018, 6, e13895.	1.7	7
27	Uniform tube models with single reflection site do not explain aortic wave travel and pressure wave shape. Physiological Measurement, 2018, 39, 124006.	2.1	26
28	Carotid Flow Augmentation, Arterial Aging, and Cerebral White Matter Hyperintensities. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 2843-2853.	2.4	31
29	Modeling Arterial Pulse Pressure From Heart Rate During Sympathetic Activation by Progressive Central Hypovolemia. Frontiers in Physiology, 2018, 9, 353.	2.8	2
30	The Relationship Between the RightÂVentricle and its Load in PulmonaryÂHypertension. Journal of the American College of Cardiology, 2017, 69, 236-243.	2.8	509
31	Abnormal haemodynamic postural response in patients with chronic heart failure. ESC Heart Failure, 2017, 4, 146-153.	3.1	14
32	Waves and Windkessels reviewed. Artery Research, 2017, 18, 102.	0.6	23
33	Treatment strategies for the right heart in pulmonary hypertension. Cardiovascular Research, 2017, 113, 1465-1473.	3.8	55
34	Accuracy of Cuff-Measured Blood Pressure. Journal of the American College of Cardiology, 2017, 70, 572-586.	2.8	186
35	Validity and variability of xBRS: instantaneous cardiac baroreflex sensitivity. Physiological Reports, 2017, 5, e13509.	1.7	27
36	Support Vector Machine Based Monitoring of Cardio-Cerebrovascular Reserve during Simulated Hemorrhage. Frontiers in Physiology, 2017, 8, 1057.	2.8	12

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37	Contribution of the Arterial System and the Heart to Blood Pressure during Normal Aging â€“ A Simulation Study. PLoS ONE, 2016, 11, e0157493.	2.5	24
38	Wave Separation, Wave Intensity, the Reservoir-Wave Concept, and the Instantaneous Wave-Free Ratio. Hypertension, 2015, 66, 93-98.	2.7	73
39	Bridging cardiovascular physics, physiology, and clinical practice: Karel H. Wesseling, pioneer of continuous noninvasive hemodynamic monitoring. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 308, H153-H156.	3.2	11
40	The Arterial Load and Its Role on the Heart. Hypertension, 2015, 65, 29-30.	2.7	4
41	Arterial Pressure Variation as a Biomarker of Preload Dependency in Spontaneously Breathing Subjects â€“ A Proof of Principle. PLoS ONE, 2015, 10, e0137364.	2.5	17
42	Arterial pressure variations as parameters of brain perfusion in response to central blood volume depletion and repletion. Frontiers in Physiology, 2014, 5, 157.	2.8	12
43	Noninvasive Arterial Blood Pressure Waveforms in Patients with Continuous-Flow Left Ventricular Assist Devices. ASAIO Journal, 2014, 60, 154-161.	1.6	26
44	Determinants of vascular and cardiac baroreflex sensitivity values in a random population sample. Medical and Biological Engineering and Computing, 2014, 52, 65-73.	2.8	13
45	Central Versus Peripheral Blood Pressure in Malignant Hypertension; Effects of Antihypertensive Treatment. American Journal of Hypertension, 2013, 26, 574-579.	2.0	6
46	Magnitude and return time of the reflected wave. Journal of Hypertension, 2012, 30, 932-939.	0.5	66
47	Wave transmission and reflection of waves â€œThe myth is in their useâ€ Artery Research, 2012, 6, 1.	0.6	22
48	Red wine polyphenols do not lower peripheral or central blood pressure in high normal blood pressure and hypertension. American Journal of Hypertension, 2012, 25, 718-723.	2.0	33
49	Arterial wave reflection decreases gradually from supine to upright. Blood Pressure, 2011, 20, 370-375.	1.5	19
50	Baroreflex sensitivity is higher during acute psychological stress in healthy subjects under Î²-adrenergic blockade. Clinical Science, 2011, 120, 161-167.	4.3	9
51	Hemodynamic mechanisms underlying prolonged post-faint hypotension. Clinical Autonomic Research, 2011, 21, 405-413.	2.5	11
52	Aortic pressure wave reconstruction during exercise is improved by adaptive filtering: a pilot study. Medical and Biological Engineering and Computing, 2011, 49, 909-916.	2.8	10
53	Cardiac oxygen supply is compromised during the night in hypertensive patients. Medical and Biological Engineering and Computing, 2011, 49, 1073-81.	2.8	3
54	Noninvasive Blood Pressure Measurement by the Nexfin Monitor During Reduced Arterial Pulsatility: A Feasibility Study. ASAIO Journal, 2010, 56, 221-227.	1.6	47

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55	Effects on Peripheral and Central Blood Pressure of Cocoa With Natural or High-Dose Theobromine. Hypertension, 2010, 56, 839-846.	2.7	70
56	Nexfin Noninvasive Continuous Blood Pressure Validated Against Riva-Rocci/Korotkoff. American Journal of Hypertension, 2009, 22, 378-383.	2.0	195
57	Evaluation of Noninvasive Methods to Assess Wave Reflection and Pulse Transit Time From the Pressure Waveform Alone. Hypertension, 2009, 53, 142-149.	2.7	108
58	Modeling the Instantaneous Pressureâ€"Volume Relation of the Left Ventricle: A Comparison of Six Models. Annals of Biomedical Engineering, 2009, 37, 1710-1726.	2.5	30
59	The arterial Windkessel. Medical and Biological Engineering and Computing, 2009, 47, 131-141.	2.8	837
60	Comparison of arterial waves derived by classical wave separation and wave intensity analysis in a model of aortic coarctation. Medical and Biological Engineering and Computing, 2009, 47, 211-220.	2.8	36
61	Arterial hemodynamics and wave analysis in the frequency and time domains: an evaluation of the paradigms. Medical and Biological Engineering and Computing, 2009, 47, 107-110.	2.8	19
62	Steep fall in cardiac output is main determinant of hypotension during drug-free and nitroglycerine-induced orthostatic vasovagal syncope. Heart Rhythm, 2008, 5, 1695-1701.	0.7	92
63	Location of a Reflection Site Is Elusive. Hypertension, 2008, 52, 478-483.	2.7	127
64	Wave Reflection: Wasted Effort in Left Ventricular Hypertrophy. American Journal of Hypertension, 2008, 21, 243-243.	2.0	5
65	Individualization of transfer function in estimation of central aortic pressure from the peripheral pulse is not required in patients at rest. Journal of Applied Physiology, 2008, 105, 1858-1863.	2.5	59
66	Arterial pressure transfer characteristics: effects of travel time. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H800-H807.	3.2	47
67	Changes in finger-aorta pressure transfer function during and after exercise. Journal of Applied Physiology, 2006, 101, 1207-1214.	2.5	38
68	Time course analysis of baroreflex sensitivity during postural stress. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 291, H2864-H2874.	3.2	75
69	Quantification of Wave Reflection in the Human Aorta From Pressure Alone. Hypertension, 2006, 48, 595-601.	2.7	267
70	Beta-blocking therapy in patients with the Marfan syndrome and entire aortic replacement. European Journal of Cardio-thoracic Surgery, 2004, 26, 901-906.	1.4	19
71	Sublingual Nitroglycerin Used in Routine Tilt Testing Provokes a Cardiac Output-Mediated Vasovagal Response. Journal of the American College of Cardiology, 2004, 44, 588-593.	2.8	60
72	Time-domain cross-correlation baroreflex sensitivity. Journal of Hypertension, 2004, 22, 1371-1380.	0.5	204

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73	Finometer, finger pressure measurements with the possibility to reconstruct brachial pressure. Blood Pressure Monitoring, 2003, 8, 27-30.	0.8	179
74	Left ventricular wall stress normalization in chronic pressure-overloaded heart: a mathematical model study. American Journal of Physiology - Heart and Circulatory Physiology, 2000, 279, H1120-H1127.	3.2	27
75	Total arterial inertance as the fourth element of the windkessel model. American Journal of Physiology - Heart and Circulatory Physiology, 1999, 276, H81-H88.	3.2	202