Jean-Claude Barthelemy

List of Publications by Year
in descending order

122	4,334	101543	128289
papers	citations	36 h-index	60 g-index

125	125	125	6697
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Even a low-dose of moderate-to-vigorous physical activity reduces mortality by 22% in adults aged â‰¥60â€…years: a systematic review and meta-analysis. British Journal of Sports Medicine, 2015, 49, 1262-1267.	6.7	414
2	Wavelet transform to quantify heart rate variability and to assess its instantaneous changes. Journal of Applied Physiology, 1999, 86, 1081-1091.	2.5	194
3	Relationship Among the Severity of Sleep Apnea Syndrome, Cardiac Arrhythmias, and Autonomic Imbalance. PACE - Pacing and Clinical Electrophysiology, 2003, 26, 669-677.	1.2	135
4	Premature Atrial Contractions in the General Population. Circulation, 2012, 126, 2302-2308.	1.6	135
5	Autonomic adaptations to intensive and overload training periods: a laboratory study. Medicine and Science in Sports and Exercise, 2002, 34, 1660-1666.	0.4	118
6	Assessing renal graft function in clinical trials: Can tests predicting glomerular filtration rate substitute for a reference method?. Kidney International, 2004, 65, 289-297.	5.2	114
7	Heart rate variability in an ageing population and its association with lifestyle and cardiovascular risk factors: results of the SAPALDIA study. Europace, 2006, 8, 521-529.	1.7	113
8	Autonomic Nervous System Activity and Decline as Prognostic Indicators of Cardiovascular and Cerebrovascular Events: The â€˜PROOFâ€™ Study. Neuroepidemiology, 2007, 29, 18-28.	2.3	111
9	HRVanalysis: A Free Software for Analyzing Cardiac Autonomic Activity. Frontiers in Physiology, 2016, 7, 557.	2.8	106
10	Automatic Cardiac Event Recorders Reveal Paroxysmal Atrial Fibrillation after Unexplained Strokes or Transient Ischemic Attacks. Annals of Noninvasive Electrocardiology, 2003, 8, 194-199.	1.1	100
11	Frequent and Prolonged Asymptomatic Episodes of Paroxysmal Atrial Fibrillation Revealed by Automatic Longâ€Term Event Recorders in Patients with a Negative 24â€Hour Holter. PACE - Pacing and Clinical Electrophysiology, 2002, 25, 1587-1593.	1.2	95
12	Autonomic nervous system activity in premature and full-term infants from theoretical term to 7Âyears. Autonomic Neuroscience: Basic and Clinical, 2007, 136, 105-109.	2.8	93
13	Frequency of pain crises in sickle cell anemia and its relationship with the sympatho-vagal balance, blood viscosity and inflammation. Haematologica, 2011, 96, 1589-1594.	3.5	93
14	Skeletal Muscle Lipid Content and Oxidative Activity in Relation to Muscle Fiber Type in Aging and Metabolic Syndrome. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2015, 70, 566-576.	3.6	93
15	Autonomic cardiac control of very preterm newborns: A prolonged dysfunction. Early Human Development, 2008, 84, 681-687.	1.8	85
16	Interval training in elderly men increases both heart rate variability and baroreflex activity. Clinical Autonomic Research, 2005, 15, 107-115.	2.5	78
17	Effects of passive smoking on heart rate variability, heart rate and blood pressure: an observational study. International Journal of Epidemiology, 2007, 36, 834-840.	1.9	76
18	High Accuracy of Automatic Detection of Atrial Fibrillation Using Wavelet Transform of Heart Rate Intervals. PACE - Pacing and Clinical Electrophysiology, 2002, 25, 457-462.	1.2	63

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19	Effect of acute hypoxia on QT rate dependence and corrected QT interval in healthy subjects. American Journal of Cardiology, 2003, 91, 916-919.	1.6	61
20	Association between severe obstructive sleep apnea and incident arterial hypertension in the older people population. Sleep Medicine, 2013, 14, 838-842.	1.6	58
21	Effect of physical activity on heart rate variability in normal weight, overweight and obese subjects: results from the SAPALDIA study. European Journal of Applied Physiology, 2008, 104, 557-565.	2.5	53
22	Obstructive Sleep Apnea is Associated with Preserved Bone Mineral Density in Healthy Elderly Subjects. Sleep, 2013, 36, 1509-1515.	1.1	53
23	Chronotropic incompetence response to exercise in congestive heart failure, relationship with the cardiac autonomic status. Clinical Physiology, 2001, 21, 335-342.	0.7	52
24	Cardiac baroreflex control in humans during and immediately after brief exposure to simulated high altitude. Clinical Physiology and Functional Imaging, 2002, 22, 301-306.	1.2	49
25	Cardiac Interbeat Interval Increment for the Identification of Obstructive Sleep Apnea. PACE - Pacing and Clinical Electrophysiology, 2002, 25, 1192-1199.	1.2	49
26	C-reactive protein implications in new-onset hypertension in a healthy population initially aged 65 years: the Proof study. Journal of Hypertension, 2009, 27, 736-743.	0.5	49
27	Cavotricuspid isthmus angiography predicts atrial flutter ablation efficacy in 281 patients randomized between 8 mm- and externally irrigated-tip catheter. European Heart Journal, 2006, 27, 1833-1840.	2.2	47
28	Desperately seeking grey matter volume changes in sleep apnea: A methodological review of magnetic resonance brain voxel-based morphometry studies. Sleep Medicine Reviews, 2016, 25, 112-120.	8.5	47
29	Wavelet transform of heart rate variability to assess autonomic nervous system activity does not predict arousal from general anesthesia. Canadian Journal of Anaesthesia, 2001, 48, 859-863.	1.6	44
30	Glutathione S -Transferase Polymorphisms, Passive Smoking, Obesity, and Heart Rate Variability in Nonsmokers. Environmental Health Perspectives, 2008, 116, 1494-1499.	6.0	44
31	Undiagnosed sleepâ€related breathing disorders are associated with focal brainstem atrophy in the elderly. Human Brain Mapping, 2009, 30, 2090-2097.	3.6	44
32	Higher Gait Variability is Associated with Decreased Parietal Gray Matter Volume Among Healthy Older Adults. Brain Topography, 2014, 27, 293-295.	1.8	44
33	Exercise Frequency Determines Heart Rate Variability Gains in Older People: A Meta-Analysis and Meta-Regression. Sports Medicine, 2019, 49, 719-729.	6.5	42
34	Lack of specific gray matter alterations in restless legs syndrome in elderly subjects. Journal of Neurology, 2010, 257, 344-348.	3.6	41
35	Autonomic nervous system activity is independently associated with the risk of shift in the non-dipper blood pressure pattern. Hypertension Research, 2010, 33, 1032-1037.	2.7	40
36	Preliminary study of efficacy of cup suction in the correction of typical pectus excavatum. Journal of Pediatric Surgery, 2016, 51, 183-187.	1.6	40

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37	Relation of Central Fat Mass to Obstructive Sleep Apnea in the Elderly. Sleep, 2013, 36, 501-507.	1.1	39
38	Dominance in cardiac parasympathetic activity during real recreational SCUBA diving. European Journal of Applied Physiology, 2009, 106, 345-352.	2.5	38
39	Differences in Heart Rate Variability Associated with Long-Term Exposure to NO ₂. Environmental Health Perspectives, 2008, 116, 1357-1361.	6.0	35
40	Nocturnal autonomic nervous system activity impairment in sickle cell trait carriers. Clinical Physiology and Functional Imaging, 2006, 26, 87-91.	1.2	34
41	Alteration of QT Rate Dependence Reflects Cardiac Autonomic Imbalance in Patients with Obstructive Sleep Apnea Syndrome. PACE - Pacing and Clinical Electrophysiology, 2003, 26, 1446-1453.	1.2	33
42	Continuous Positive Airway Pressure Treatment Improves the QT Rate Dependence Adaptation of Obstructive Sleep Apnea Patients. PACE - Pacing and Clinical Electrophysiology, 2005, 28, 819-825.	1.2	32
43	Autonomic dysfunction with early respiratory syncytial virus-related infection. Autonomic Neuroscience: Basic and Clinical, 2010, 156, 90-95.	2.8	32
44	Obstructive sleep apnea and the metabolic syndrome in an elderly healthy population: the SYNAPSE cohort. Sleep and Breathing, 2012, 16, 895-902.	1.7	32
45	Metabolic Syndrome is Associated with Poor Memory and Executive Performance in Elderly Community Residents: TheÂPROOF Study. American Journal of Geriatric Psychiatry, 2014, 22, 1096-1104.	1.2	31
46	Association of increased gait variability while dual tasking and cognitive decline: results from a prospective longitudinal cohort pilot study. GeroScience, 2017, 39, 439-445.	4.6	31
47	Autonomic maturation from birth to 2 years: normative values. Heliyon, 2019, 5, e01300.	3.2	31
48	Quantification of cumulated physical fatigue at the workplace. Pflugers Archiv European Journal of Physiology, 2002, 445, 267-272.	2.8	29
49	Refeeding normalizes the QT rate dependence of female anorexic patients. American Journal of Cardiology, 2005, 95, 277-280.	1.6	29
50	Lower skeletal muscle capillarization in hypertensive elderly men. Experimental Gerontology, 2016, 76, 80-88.	2.8	29
51	Electronic cigarettes and health with special focus on cardiovascular effects: position paper of the European Association of Preventive Cardiology (EAPC). European Journal of Preventive Cardiology, 2021, 28, 1552-1566.	1.8	29
52	Heart rate increment: an electrocardiological approach for the early detection of obstructive sleep apnoea/hypopnoea syndrome. Clinical Science, 2004, 107, 105-110.	4.3	28
53	Can maintaining cognitive function at 65 years old predict successful ageing 6 years later? The PROOF study. Age and Ageing, 2011, 40, 259-265.	1.6	27
54	Association Between Ambulatory 24-Hour Blood Pressure Levels and Brain Volume Reduction. Hypertension, 2012, 60, 1324-1331.	2.7	27

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55	Impaired baroreflex sensitivity and the risks of new-onset ambulatory hypertension, in an elderly population-based study. International Journal of Cardiology, 2013, 168, 4010-4014.	1.7	27
56	Accuracy of an automatic and patient-triggered long-term solid memory ambulatory cardiac event recorder. American Journal of Cardiology, 1997, 80, 1095-1098.	1.6	24
57	Diabetes, impaired fasting glucose, and cognitive decline in a population of elderly community residents. Aging Clinical and Experimental Research, 2012, 24, 377-383.	2.9	23
58	Pulmonary hypertension does not affect the autonomic nervous system dysfunction of sickle cell disease. American Journal of Hematology, 2009, 84, 311-312.	4.1	21
59	Chronotropic incompetence to exercise separates low body weight from established anorexia nervosa. Clinical Physiology and Functional Imaging, 2004, 24, 270-275.	1.2	20
60	Alteration of the QT Rate Dependence in Anorexia Nervosa. PACE - Pacing and Clinical Electrophysiology, 2004, 27, 1099-1104.	1.2	20
61	Heart Rate Variability in Association with Frequent Use of Household Sprays and Scented Products in SAPALDIA. Environmental Health Perspectives, 2012, 120, 958-964.	6.0	20
62	Does Subjective Sleep Affect Bone Mineral Density in Older People with Minimal Health Disorders? The PROOF Cohort. Journal of Clinical Sleep Medicine, 2016, 12, 1461-1469.	2.6	20
63	Incidental findings on brain magnetic resonance imaging in the elderly:the PROOF study. Brain Imaging and Behavior, 2017, 11, 293-299.	2.1	20
64	Does obstructive sleep apnea affect exercise capacity and the hemodynamic response to exercise? An individual patient data and aggregate meta-analysis. Sleep Medicine Reviews, 2019, 45, 42-53.	8.5	20
65	The adverse impact of obesity on heart rate variability is modified by a NFE2L2 gene variant: The SAPALDIA cohort. International Journal of Cardiology, 2017, 228, 341-346.	1.7	19
66	Relationship between Daily Physical Activity and ANS Activity in Patients with CHF. Medicine and Science in Sports and Exercise, 2005, 37, 1257-1263.	0.4	18
67	Long-term exposure to traffic-related PM10 and decreased heart rate variability: Is the association restricted to subjects taking ACE inhibitors?. Environment International, 2012, 48, 9-16.	10.0	17
68	Leukoaraiosis and ambulatory blood pressure load in a healthy elderly cohort study: The PROOF study. International Journal of Cardiology, 2014, 172, 59-63.	1.7	17
69	Effect of exercise training on heart rate variability in patients with obstructive sleep apnea: A randomized controlled trial. Scandinavian Journal of Medicine and Science in Sports, 2019, 29, 1254-1262.	2.9	17
70	Infant botulism intoxication and autonomic nervous system dysfunction. Anaerobe, 2009, 15, 197-200.	2.1	16
71	Acute Moderate Exercise Does Not Further Alter the Autonomic Nervous System Activity in Patients with Sickle Cell Anemia. PLoS ONE, 2014, 9, e95563.	2.5	16
72	A Proof of Concept to Bridge the Gap between Mass Spectrometry Imaging, Protein Identification and Relative Quantitation: MSI–LC-MS/MS-LF. Proteomes, 2016, 4, 32.	3.5	15

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73	Muscle Proteomic and Transcriptomic Profiling of Healthy Aging and Metabolic Syndrome in Men. International Journal of Molecular Sciences, 2021, 22, 4205.	4.1	15
74	Sleep-related breathing disorders and gait variability: a cross-sectional preliminary study. BMC Pulmonary Medicine, 2014, 14, 140.	2.0	14
75	Autonomic cardiovascular adaptations to acute head-out water immersion, head-down tilt and supine position. European Journal of Applied Physiology, 2020, 120, 337-347.	2.5	14
76	Hemorheology and heart rate variability: is there a relationship?. Clinical Hemorheology and Microcirculation, 2008, 38, 257-65.	1.7	14
77	Autonomic dysfunction in 2009 pandemic influenza A (H1N1) virus-related infection: A pediatric comparative study. Autonomic Neuroscience: Basic and Clinical, 2011, 162, 77-83.	2.8	13
78	Elderly Patients with Ongoing Migraine Show Reduced Gray Matter Volume in Second Somatosensory Cortex. Journal of Oral and Facial Pain and Headache, 2018, 32, 67-74.	1.4	13
79	Depressive symptoms and autonomic nervous system dysfunction in an elderly population-based study: The PROOF study. Journal of Affective Disorders, 2012, 143, 153-159.	4.1	12
80	Even a Previous Light-Active Physical Activity at Work Still Reduces Late Myocardial Infarction and Stroke in Retired Adults Aged>65 Years by 32%: The PROOF Cohort Study. Frontiers in Public Health, 2019, 7, 51.	2.7	12
81	Pre-participation cardiovascular evaluation in Pacific Island athletes. International Journal of Cardiology, 2019, 278, 273-279.	1.7	12
82	Volunteer and career French firefighters: Cardiovascular risk factors and cardiovascular risk assessment. European Journal of Preventive Cardiology, 2020, 27, 107-109.	1.8	12
83	Monitoring of ventilation during the early part of cardiopulmonary exercise testing: The first step to detect central sleep apnoea in chronic heart failure. Sleep Medicine, 2008, 9, 411-417.	1.6	10
84	Serum lipid profile, sleep-disordered breathing and blood pressure in the elderly: a 10-year follow-up of the PROOF-SYNAPSE cohort. Sleep Medicine, 2017, 39, 14-22.	1.6	10
85	Muscle Loss Associated Changes of Oxylipin Signatures During Biological Aging: An Exploratory Study From the PROOF Cohort. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2019, 74, 608-615.	3.6	10
86	Modulations of human autonomic function induced by positive pressure-assisted breathing. Clinical Physiology and Functional Imaging, 2006, 26, 15-20.	1.2	9
87	Alteration of baroreflex sensitivity in the elderly: The relationship with metabolic syndrome components. International Journal of Cardiology, 2012, 155, 333-335.	1.7	9
88	Obstructive Sleep Apnea in Cardiac Rehabilitation Patients. Journal of Clinical Sleep Medicine, 2018, 14, 1119-1126.	2.6	9
89	Prevalence of Clinical and Ambulatory Hypertension in a Population of 65â€Yearâ€Olds: The PROOF Study. Journal of Clinical Hypertension, 2010, 12, 160-165.	2.0	8
90	ECG-derived respiration: A promising tool for sleep-disordered breathing diagnosis in chronic heart failure patients. International Journal of Cardiology, 2015, 186, 7-9.	1.7	8

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91	Effects of strenuous exercise on autonomic nervous system activity in sickle cell trait carriers. Autonomic Neuroscience: Basic and Clinical, 2008, 143, 68-72.	2.8	7
92	Relationship of cardiac involvement with arterial stiffness in a general population of 65-year-olds in the PROOF study. Journal of Hypertension, 2010, 28, 389-394.	0.5	7
93	Aortic root size and sleep apnea in elderly: A cohort study. International Journal of Cardiology, 2011, 151, 101-102.	1.7	7
94	Use of high-frequency peak in spectral analysis of heart rate increment to improve screening of obstructive sleep apnoea. Sleep and Breathing, 2011, 15, 837-843.	1.7	7
95	Relationship between acute chest syndrome and the sympatho-vagal balance in adults with hemoglobin SS disease; a case control study. Clinical Hemorheology and Microcirculation, 2013, 53, 231-238.	1.7	7
96	Supra-Epiglottic Upper Airway Volume in Elderly Patients with Obstructive Sleep Apnea Hypopnea Syndrome. PLoS ONE, 2016, 11, e0157720.	2.5	7
97	Sleep-related autonomic overactivity in a general elderly population and its relationship to cardiovascular regulation. Heart and Vessels, 2016, 31, 46-51.	1.2	7
98	Bariatric surgery associated with percutaneous auricular vagal stimulation: A new prospective treatment on weight loss. International Journal of Surgery, 2015, 18, 55-56.	2.7	6
99	Sleep apnoea in the asymptomatic elderly: a real issue for the brain?. European Respiratory Journal, 2018, 51, 1702450.	6.7	6
100	Role of Gender and Physical Activity Level on Cardiovascular Risk Factors and Biomarkers of Oxidative Stress in the Elderly. Oxidative Medicine and Cellular Longevity, 2020, 2020, 1-9.	4.0	6
101	Arrhythmic Risk Stratification After Myocardial Infarction Using Ambulatory Electrocardiography Signal Averaging. PACE - Pacing and Clinical Electrophysiology, 2002, 25, 791-798.	1.2	5
102	Heart rate variability and baroreflex sensitivity in bilateral lung transplant recipients. Clinical Physiology and Functional Imaging, 2018, 38, 872-880.	1.2	5
103	Arterial stiffness alteration and obstructive sleep apnea in an elderly cohort free of cardiovascular event history: the PROOF cohort study. Sleep and Breathing, 2019, 23, 201-208.	1.7	5
104	Causal analyses to study autonomic regulation during acute headâ€out water immersion, headâ€down tilt and supine position. Experimental Physiology, 2020, 105, 1216-1222.	2.0	5
105	Leukoaraiosis and Gray Matter Volume Alteration in Older Adults: The PROOF Study. Frontiers in Neuroscience, 2021, 15, 747569.	2.8	5
106	Resistance Training of Inspiratory Muscles After Coronary Artery Disease May Improve Obstructive Sleep Apnea in Outpatient Cardiac Rehabilitation: RICAOS Study. Frontiers in Physiology, 2022, 13, 846532.	2.8	5
107	Autonomic activation during sleep and new-onset ambulatory hypertension in the elderly. International Journal of Cardiology, 2012, 155, 155-159.	1.7	4
108	Effects of gravitational acceleration on cardiovascular autonomic control in resting humans. European Journal of Applied Physiology, 2015, 115, 1417-1427.	2.5	4

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109	Exercise electrocardiogram in middle-aged and older leisure time sportsmen: 100 exercise tests would be enough to identify one silent myocardial ischemia at risk for cardiac event. International Journal of Cardiology, 2018, 257, 16-23.	1.7	4
110	Association Between Physical Activity, Quadriceps Muscle Performance, and Biological Characteristics of Very Old Men and Women. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2021, , .	3.6	4
111	Forelimb postischaemic reactive hyperaemia is impaired by hypotensive low body negative pressure in healthy subjects. Clinical Physiology and Functional Imaging, 2006, 26, 132-137.	1.2	3
112	Comment on â€˜Abnormal autonomic cardiac response to transient hypoxia in sickle cell anemiaâ€™. Physiological Measurement, 2008, 29, L1-L2.	2.1	3
113	Sudomotor function and obesity-related risk factors in an elderly healthy population: The PROOFâ€“Synapse Study. International Journal of Cardiology, 2015, 186, 247-249.	1.7	3
114	Fifteen Minutes Daily Brisk Walk May Be a New Best Target in Very Old Adults: Age Is Not an Excuse to Not Exercise. Journal of the American Medical Directors Association, 2018, 19, 273-275.	2.5	3
115	Insulin Resistance and Type 2 Diabetes in Asymptomatic Obstructive Sleep Apnea: Results of the PROOF Cohort Study After 7 Years of Follow-Up. Frontiers in Physiology, 2021, 12, 650758.	2.8	3
116	Thoracic impedance, in association with oximetry, in a multi-modal ECG Holter system is useful for screening sleep disordered breathing. International Journal of Cardiology, 2013, 163, 100-102.	1.7	2
117	We need clear health messages about exercise. BMJ, The, 2016, 355, i6252.	6.0	2
118	Comments on the article: Occipital C1â€“C2 Neuromodulation Decreases Body Mass and Fat Stores and Modifies Activity of the Autonomic Nervous System in Morbidly Obese Patientsâ€”a Pilot Study. Obesity Surgery, 2016, 26, 384-385.	2.1	2
119	Effect of Vagal Nerve Blockade on Moderate Obesity with an Obesity-Related Comorbid Condition: the ReCharge Study. Obesity Surgery, 2016, 26, 2221-2222.	2.1	1
120	Is there a relation between autonomic nervous system activity and skin ageing? Evaluation of heart rate variability and skin ageing in 209 elderly subjects. Experimental Dermatology, 2017, 26, 278-281.	2.9	1
121	Effect of graded leg cycling on postischaemic forearm blood flow in healthy subjects. Clinical Physiology and Functional Imaging, 2007, 28, 071116231949001-???.	1.2	0
122	Objective Non-irradiant Imaging of Fat Distribution: New Essential Tools for the Bariatric Surgery?. Obesity Surgery, 2016, 26, 1940-1941.	2.1	0