# Alun D Hughes

## List of Publications by Citations

Source: https://exaly.com/author-pdf/206713/alun-d-hughes-publications-by-citations.pdf

Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

628 19,850 119 70 h-index g-index citations papers 6.51 23,032 750 5.4 avg, IF L-index ext. papers ext. citations

| #   | Paper  | IF                | Citations |
|-----|--|-------------------|-----------|
| 628 | Differential impact of blood pressure-lowering drugs on central aortic pressure and clinical outcomes: principal results of the Conduit Artery Function Evaluation (CAFE) study. <i>Circulation</i> , <b>2006</b> , 113, 1213-25   | 16.7              | 1786      |
| 627 | A perspective of polyamine metabolism. <i>Biochemical Journal</i> , <b>2003</b> , 376, 1-14  | 3.8               | 752       |
| 626 | Development and validation of a new adenosine-independent index of stenosis severity from coronary wave-intensity analysis: results of the ADVISE (ADenosine Vasodilator Independent Stenosis Evaluation) study. <i>Journal of the American College of Cardiology</i> , <b>2012</b> , 59, 1392-402       | 15.1              | 453       |
| 625 | Metabolite profiling and cardiovascular event risk: a prospective study of 3 population-based cohorts. <i>Circulation</i> , <b>2015</b> , 131, 774-85  | 16.7              | 367       |
| 624 | Endothelial von Willebrand factor regulates angiogenesis. <i>Blood</i> , <b>2011</b> , 117, 1071-80  | 2.2               | 327       |
| 623 | Evidence of a dominant backward-propagating "suction" wave responsible for diastolic coronary filling in humans, attenuated in left ventricular hypertrophy. <i>Circulation</i> , <b>2006</b> , 113, 1768-78   | 16.7              | 296       |
| 622 | Segmentation of blood vessels from red-free and fluorescein retinal images. <i>Medical Image Analysis</i> , <b>2007</b> , 11, 47-61  | 15.4              | 294       |
| 621 | Abnormalities of retinal microvascular structure and risk of mortality from ischemic heart disease and stroke. <i>Hypertension</i> , <b>2006</b> , 47, 975-81  | 8.5               | 265       |
| 620 | Cohort profile: updating the cohort profile for the MRC National Survey of Health and Development: a new clinic-based data collection for ageing research. <i>International Journal of Epidemiology</i> , <b>2011</b> , 40, e1-9   | 7.8               | 225       |
| 619 | First-in-man safety evaluation of renal denervation for chronic systolic heart failure: primary outcome from REACH-Pilot study. <i>International Journal of Cardiology</i> , <b>2013</b> , 162, 189-92   | 3.2               | 222       |
| 618 | Blood flow and vessel mechanics in a physiologically realistic model of a human carotid arterial bifurcation. <i>Journal of Biomechanics</i> , <b>2000</b> , 33, 975-84  | 2.9               | 212       |
| 617 | Cardiac and vascular pathophysiology in hypertension. British Heart Journal, 2003, 89, 1104-9  |                   | 179       |
| 616 | Cardiovascular and metabolic effects of metformin in patients with type 1 diabetes (REMOVAL): a double-blind, randomised, placebo-controlled trial. <i>Lancet Diabetes and Endocrinology,the</i> , <b>2017</b> , 5, 597-   | ·609 <sup>1</sup> | 177       |
| 615 | Differences in smoking associated DNA methylation patterns in South Asians and Europeans. <i>Clinical Epigenetics</i> , <b>2014</b> , 6, 4   | 7.7               | 176       |
| 614 | The relationship between metabolic risk factors and incident cardiovascular disease in Europeans, South Asians, and African Caribbeans: SABRE (Southall and Brent Revisited) a prospective population-based study. <i>Journal of the American College of Cardiology</i> , <b>2013</b> , 61, 1777-86      | 15.1              | 176       |
| 613 | Diagnostic classification of the instantaneous wave-free ratio is equivalent to fractional flow reserve and is not improved with adenosine administration. Results of CLARIFY (Classification Accuracy of Pressure-Only Ratios Against Indices Using Flow Study). <i>Journal of the American College</i> | 15.1              | 175       |
| 612 | of Cardiology, <b>2013</b> , 61, 1409-20 Retinal vascular tree morphology: a semi-automatic quantification. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2002</b> , 49, 912-7   | 5                 | 167       |

| 611 | Tissue Doppler E/E' ratio is a powerful predictor of primary cardiac events in a hypertensive population: an ASCOT substudy. <i>European Heart Journal</i> , <b>2010</b> , 31, 747-52  | 9.5               | 148 |
|-----|--|-------------------|-----|
| 610 | Circulating MicroRNA-122 Is Associated With the Risk of New-Onset Metabolic Syndrome and Type 2 Diabetes. <i>Diabetes</i> , <b>2017</b> , 66, 347-357  | 0.9               | 141 |
| 609 | Tyrosine kinase inhibitors block calcium channel currents in vascular smooth muscle cells. <i>Biochemical and Biophysical Research Communications</i> , <b>1992</b> , 189, 1620-3  | 3.4               | 141 |
| 608 | Diabetes risk and amino acid profiles: cross-sectional and prospective analyses of ethnicity, amino acids and diabetes in a South Asian and European cohort from the SABRE (Southall And Brent REvisited) Study. <i>Diabetologia</i> , <b>2015</b> , 58, 968-79                    | 10.3              | 139 |
| 607 | Pre-eclampsia, antiretroviral therapy, and immune reconstitution. <i>Lancet, The</i> , <b>2002</b> , 360, 1152-4   | 40                | 135 |
| 606 | Classification performance of instantaneous wave-free ratio (iFR) and fractional flow reserve in a clinical population of intermediate coronary stenoses: results of the ADVISE registry.  EuroIntervention, 2013, 9, 91-101   | 3.1               | 134 |
| 605 | The interaction of the SRA domain of ICBP90 with a novel domain of DNMT1 is involved in the regulation of VEGF gene expression. <i>Oncogene</i> , <b>2008</b> , 27, 2187-97  | 9.2               | 133 |
| 604 | Effects of blood pressure lowering and intensive glucose control on the incidence and progression of retinopathy in patients with type 2 diabetes mellitus: a randomised controlled trial. <i>Diabetologia</i> , <b>2009</b> , 52, 2027-36   | 10.3              | 129 |
| 603 | Reconstruction of blood flow patterns in a human carotid bifurcation: a combined CFD and MRI study. <i>Journal of Magnetic Resonance Imaging</i> , <b>2000</b> , 11, 299-311   | 5.6               | 127 |
| 602 | Validation of non-invasive central blood pressure devices: ARTERY Society task force consensus statement on protocol standardization. <i>European Heart Journal</i> , <b>2017</b> , 38, 2805-2812  | 9.5               | 126 |
| 601 | The arterial reservoir pressure increases with aging and is the major determinant of the aortic augmentation index. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2010</b> , 298, H580-  | <i>ē</i> ∙²       | 125 |
| 600 | Baseline instantaneous wave-free ratio as a pressure-only estimation of underlying coronary flow reserve: results of the JUSTIFY-CFR Study (Joined Coronary Pressure and Flow Analysis to Determine Diagnostic Characteristics of Basal and Hyperemic Indices of Functional Lesion | 6                 | 124 |
| 599 | Use of simultaneous pressure and velocity measurements to estimate arterial wave speed at a single site in humans. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2006</b> , 290, H878  | -8 <del>5</del>   | 122 |
| 598 | Fluid structure interaction of patient specific abdominal aortic aneurysms: a comparison with solid stress models. <i>BioMedical Engineering OnLine</i> , <b>2006</b> , 5, 33  | 4.1               | 117 |
| 597 | Wave-energy patterns in carotid, brachial, and radial arteries: a noninvasive approach using wave-intensity analysis. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2005</b> , 289, H2   | 7 <del>0</del> -6 | 117 |
| 596 | Inhibition of carbonic anhydrase accounts for the direct vascular effects of hydrochlorothiazide. <i>Hypertension</i> , <b>1999</b> , 33, 1043-8   | 8.5               | 110 |
| 595 | Accuracy of Cuff-Measured Blood Pressure: Systematic Reviews and Meta-Analyses. <i>Journal of the American College of Cardiology</i> , <b>2017</b> , 70, 572-586   | 15.1              | 109 |
| 594 | Platelet-derived growth factor (PDGF): actions and mechanisms in vascular smooth muscle. <i>General Pharmacology</i> , <b>1996</b> , 27, 1079-89   |                   | 109 |

| 593 | Metabolomic Profiling of Statin Use and Genetic Inhibition of HMG-CoA Reductase. <i>Journal of the American College of Cardiology</i> , <b>2016</b> , 67, 1200-1210  | 15.1 | 106 |
|-----|--|------|-----|
| 592 | Meta-analysis of dose-response relationships for hydrochlorothiazide, chlorthalidone, and bendroflumethiazide on blood pressure, serum potassium, and urate. <i>Hypertension</i> , <b>2012</b> , 59, 1104-9  | 8.5  | 106 |
| 591 | Insulin resistance and truncal obesity as important determinants of the greater incidence of diabetes in Indian Asians and African Caribbeans compared with Europeans: the Southall And Brent REvisited (SABRE) cohort. <i>Diabetes Care</i> , <b>2013</b> , 36, 383-93                      | 14.6 | 105 |
| 590 | Curvature and tortuosity of the superficial femoral artery: a possible risk factor for peripheral arterial disease. <i>Journal of Applied Physiology</i> , <b>2006</b> , 101, 1412-8   | 3.7  | 99  |
| 589 | Haemodynamic effects of changes in atrioventricular and interventricular delay in cardiac resynchronisation therapy show a consistent pattern: analysis of shape, magnitude and relative importance of atrioventricular and interventricular delay. <i>Heart</i> , <b>2006</b> , 92, 1628-34 | 5.1  | 96  |
| 588 | Inter-individual variations in wall shear stress and mechanical stress distributions at the carotid artery bifurcation of healthy humans. <i>Journal of Biomechanics</i> , <b>2002</b> , 35, 1367-77   | 2.9  | 95  |
| 587 | A meta-analysis of the mechanism of blood pressure change with aging. <i>Journal of the American College of Cardiology</i> , <b>2009</b> , 54, 2087-92   | 15.1 | 92  |
| 586 | Thiazide-induced vasodilation in humans is mediated by potassium channel activation. <i>Hypertension</i> , <b>1998</b> , 32, 1071-6  | 8.5  | 92  |
| 585 | Fluid Structure interaction analysis of a patient-specific right coronary artery with physiological velocity and pressure waveforms. <i>Communications in Numerical Methods in Engineering</i> , <b>2009</b> , 25, 565-5   | 80   | 88  |
| 584 | Retinal Blood Vessel Segmentation by Means of Scale-Space Analysis and Region Growing. <i>Lecture Notes in Computer Science</i> , <b>1999</b> , 90-97  | 0.9  | 88  |
| 583 | Quantification of topological changes in retinal vascular architecture in essential and malignant hypertension. <i>Journal of Hypertension</i> , <b>2006</b> , 24, 889-94  | 1.9  | 84  |
| 582 | Hepatitis C infection and clearance: impact on atherosclerosis and cardiometabolic risk factors. <i>Gut</i> , <b>2010</b> , 59, 1135-40  | 19.2 | 81  |
| 581 | Calcium channels in vascular smooth muscle cells. <i>Journal of Vascular Research</i> , <b>1995</b> , 32, 353-70   | 1.9  | 81  |
| 580 | Wave intensity analysis and the development of the reservoir-wave approach. <i>Medical and Biological Engineering and Computing</i> , <b>2009</b> , 47, 221-32   | 3.1  | 80  |
| 579 | Recent developments in near-infrared spectroscopy (NIRS) for the assessment of local skeletal muscle microvascular function and capacity to utilise oxygen. <i>Artery Research</i> , <b>2016</b> , 16, 25-33   | 2.2  | 80  |
| 578 | Direct vascular effects of furosemide in humans. <i>Circulation</i> , <b>1997</b> , 96, 1847-52  | 16.7 | 79  |
| 577 | Pre-angioplasty instantaneous wave-free ratio pullback provides virtual intervention and predicts hemodynamic outcome for serial lesions and diffuse coronary artery disease. <i>JACC: Cardiovascular Interventions</i> , <b>2014</b> , 7, 1386-96   | 5    | 78  |
| 576 | Hybrid iFR-FFR decision-making strategy: implications for enhancing universal adoption of physiology-guided coronary revascularisation. <i>EuroIntervention</i> , <b>2013</b> , 8, 1157-65   | 3.1  | 78  |

## (2011-2009)

| 575 | Impact of statin therapy on central aortic pressures and hemodynamics: principal results of the Conduit Artery Function Evaluation-Lipid-Lowering Arm (CAFE-LLA) Study. <i>Circulation</i> , <b>2009</b> , 119, 53-61  | 16.7         | 77 |
|-----|--|--------------|----|
| 574 | Fluid-wall modelling of mass transfer in an axisymmetric stenosis: effects of shear-dependent transport properties. <i>Annals of Biomedical Engineering</i> , <b>2006</b> , 34, 1119-28  | 4.7          | 77 |
| 573 | Computer algorithms for the automated measurement of retinal arteriolar diameters. <i>British Journal of Ophthalmology</i> , <b>2001</b> , 85, 74-9  | 5.5          | 77 |
| 572 | Limitations of augmentation index in the assessment of wave reflection in normotensive healthy individuals. <i>PLoS ONE</i> , <b>2013</b> , 8, e59371  | 3.7          | 77 |
| 571 | Ethnicity and prediction of cardiovascular disease: performance of QRISK2 and Framingham scores in a U.K. tri-ethnic prospective cohort study (SABRESouthall And Brent REvisited). <i>Heart</i> , <b>2014</b> , 100, 60-7  | 5.1          | 76 |
| 570 | Determination of optimal atrioventricular delay for cardiac resynchronization therapy using acute non-invasive blood pressure. <i>Europace</i> , <b>2006</b> , 8, 358-66   | 3.9          | 75 |
| 569 | Reproducibility study of magnetic resonance image-based computational fluid dynamics prediction of carotid bifurcation flow. <i>Annals of Biomedical Engineering</i> , <b>2003</b> , 31, 142-51  | 4.7          | 75 |
| 568 | Inhibition of human vascular smooth muscle cell proliferation by lovastatin: the role of isoprenoid intermediates of cholesterol synthesis. <i>European Journal of Clinical Investigation</i> , <b>1994</b> , 24, 766-72   | 4.6          | 74 |
| 567 | Endothelium-dependent relaxation in isolated human arteries and veins. Clinical Science, 1987, 73, 547-  | <b>50</b> .5 | 74 |
| 566 | Wave reflection predicts cardiovascular events in hypertensive individuals independent of blood pressure and other cardiovascular risk factors: an ASCOT (Anglo-Scandinavian Cardiac Outcome Trial) substudy. <i>Journal of the American College of Cardiology</i> , <b>2010</b> , 56, 24-30 | 15.1         | 73 |
| 565 | The actions of calcitonin gene related peptide and vasoactive intestinal peptide as vasodilators in man in vivo and in vitro. <i>British Journal of Clinical Pharmacology</i> , <b>1987</b> , 24, 139-44   | 3.8          | 73 |
| 564 | Excess pressure integral predicts cardiovascular events independent of other risk factors in the conduit artery functional evaluation substudy of Anglo-Scandinavian Cardiac Outcomes Trial. <i>Hypertension</i> , <b>2014</b> , 64, 60-8  | 8.5          | 72 |
| 563 | Differences in the magnitude of wave reflection account for differential effects of amlodipine-versus atenolol-based regimens on central blood pressure: an Anglo-Scandinavian Cardiac Outcome Trial substudy. <i>Hypertension</i> , <b>2009</b> , 54, 724-30                                | 8.5          | 71 |
| 562 | Retinal vascular network architecture in low-birth-weight men. Journal of Hypertension, 1997, 15, 1449-  | <b>53</b> .9 | 71 |
| 561 | Effect of antihypertensive treatment on retinal microvascular changes in hypertension. <i>Journal of Hypertension</i> , <b>2008</b> , 26, 1703-7   | 1.9          | 71 |
| 560 | Analysis of complex flow and the relationship between blood pressure, wall shear stress, and intima-media thickness in the human carotid artery. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2007</b> , 293, H1031-7                                       | 5.2          | 71 |
| 559 | Thrombospondin-1 is a potent mitogen and chemoattractant for human vascular smooth muscle cells. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>1997</b> , 17, 2107-14   | 9.4          | 70 |
| 558 | Arterial pulse wave dynamics after percutaneous aortic valve replacement: fall in coronary diastolic suction with increasing heart rate as a basis for angina symptoms in aortic stenosis. <i>Circulation</i> , <b>2011</b> , 124, 1565-72   | 16.7         | 69 |

| 557 | Meta-analysis of the comparative effects of different classes of antihypertensive agents on brachial and central systolic blood pressure, and augmentation index. <i>British Journal of Clinical Pharmacology</i> , <b>2013</b> , 75, 79-92 | 3.8  | 68 |
|-----|---|------|----|
| 556 | Forward and backward waves in the arterial system: impedance or wave intensity analysis?. <i>Medical and Biological Engineering and Computing</i> , <b>2009</b> , 47, 207-10  | 3.1  | 68 |
| 555 | Large-scale genome-wide analysis identifies genetic variants associated with cardiac structure and function. <i>Journal of Clinical Investigation</i> , <b>2017</b> , 127, 1798-1812  | 15.9 | 68 |
| 554 | pp60c-src increases voltage-operated calcium channel currents in vascular smooth muscle cells. <i>Biochemical and Biophysical Research Communications</i> , <b>1995</b> , 217, 1039-44  | 3.4  | 67 |
| 553 | Attenuation of wave reflection by wave entrapment creates a "horizon effect" in the human aorta. <i>Hypertension</i> , <b>2012</b> , 60, 778-85   | 8.5  | 66 |
| 552 | Body fat is associated with reduced aortic stiffness until middle age. <i>Hypertension</i> , <b>2013</b> , 61, 1322-7   | 8.5  | 65 |
| 551 | In vivo evidence for K(Ca) channel opening properties of acetazolamide in the human vasculature. <i>British Journal of Pharmacology</i> , <b>2001</b> , 132, 443-50   | 8.6  | 64 |
| 550 | Reservoir and excess pressures predict cardiovascular events in high-risk patients. <i>International Journal of Cardiology</i> , <b>2014</b> , 171, 31-6  | 3.2  | 63 |
| 549 | Reduced systolic wave generation and increased peripheral wave reflection in chronic heart failure.<br>American Journal of Physiology - Heart and Circulatory Physiology, <b>2007</b> , 293, H557-62  | 5.2  | 61 |
| 548 | Combination of Ca2+ -activated K+ channel blockers inhibits acetylcholine-evoked nitric oxide release in rat superior mesenteric artery. <i>British Journal of Pharmacology</i> , <b>2006</b> , 149, 560-72                                 | 8.6  | 60 |
| 547 | A feasibility study of the association of exposure to biomass smoke with vascular function, inflammation, and cellular aging. <i>Environmental Research</i> , <b>2014</b> , 135, 165-72   | 7.9  | 58 |
| 546 | Analysis of flow disturbance in a stenosed carotid artery bifurcation using two-equation transitional and turbulence models. <i>Journal of Biomechanical Engineering</i> , <b>2008</b> , 130, 061008  | 2.1  | 58 |
| 545 | Measurement of pulse wave velocity: site matters. <i>Journal of Hypertension</i> , <b>2007</b> , 25, 383-9  | 1.9  | 57 |
| 544 | How do thiazide and thiazide-like diuretics lower blood pressure?. <i>JRAAS - Journal of the Renin-Angiotensin-Aldosterone System</i> , <b>2004</b> , 5, 155-60   | 3    | 57 |
| 543 | Exercise central (aortic) blood pressure is predominantly driven by forward traveling waves, not wave reflection. <i>Hypertension</i> , <b>2013</b> , 62, 175-82  | 8.5  | 56 |
| 542 | Importance of the aortic reservoir in determining the shape of the arterial pressure waveform [] The forgotten lessons of Frank. <i>Artery Research</i> , <b>2007</b> , 1, 40   | 2.2  | 56 |
| 541 | Effects of protein tyrosine kinase inhibitors on voltage-operated calcium channel currents in vascular smooth muscle cells and pp60(c-src) kinase activity. <i>British Journal of Pharmacology</i> , <b>2000</b> , 129, 1347-54             | 8.6  | 56 |
| 540 | Mechanisms of Myocardial Ischemia in Hypertrophic Cardiomyopathy: Insights From Wave Intensity Analysis and Magnetic Resonance. <i>Journal of the American College of Cardiology</i> , <b>2016</b> , 68, 1651-1660                          | 15.1 | 56 |

## (2006-1995)

| 539 | Effects of tyrosine kinase inhibitors on the contractility of rat mesenteric resistance arteries. <i>British Journal of Pharmacology</i> , <b>1995</b> , 114, 1266-72   | 8.6  | 54 |
|-----|---|------|----|
| 538 | KV 7 channels are involved in hypoxia-induced vasodilatation of porcine coronary arteries. <i>British Journal of Pharmacology</i> , <b>2014</b> , 171, 69-82  | 8.6  | 53 |
| 537 | Effects of transmural pressure and wall shear stress on LDL accumulation in the arterial wall: a numerical study using a multilayered model. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2007</b> , 292, H3148-57   | 5.2  | 53 |
| 536 | Chloride and bicarbonate transport in rat resistance arteries. <i>Journal of Physiology</i> , <b>1991</b> , 436, 57-73  | 3.9  | 53 |
| 535 | The action of caffeine on inward barium current through voltage-dependent calcium channels in single rabbit ear artery cells. <i>Pflugers Archiv European Journal of Physiology</i> , <b>1990</b> , 416, 462-6  | 4.6  | 53 |
| 534 | Force, membrane potential, and [Ca2+]i during activation of rat mesenteric small arteries with norepinephrine, potassium, aluminum fluoride, and phorbol ester. Effects of changes in pHi. <i>Circulation Research</i> , <b>1993</b> , 73, 314-24   | 15.7 | 52 |
| 533 | Hemodynamic response to intravenous adenosine and its effect on fractional flow reserve assessment: results of the Adenosine for the Functional Evaluation of Coronary Stenosis Severity (AFFECTS) study. <i>Circulation: Cardiovascular Interventions</i> , <b>2013</b> , 6, 654-61                                    | 6    | 51 |
| 532 | Effect of tumour necrosis factor-alpha and interleukin 1beta on endothelium-dependent relaxation in rat mesenteric resistance arteries in vitro. <i>British Journal of Pharmacology</i> , <b>2003</b> , 138, 1285-94  | 8.6  | 51 |
| 531 | Sex Dimorphism in the Myocardial Response to Aortic Stenosis. <i>JACC: Cardiovascular Imaging</i> , <b>2018</b> , 11, 962-973   | 8.4  | 51 |
| 530 | Ethnicity-specific obesity cut-points in the development of Type 2 diabetes - a prospective study including three ethnic groups in the United Kingdom. <i>Diabetic Medicine</i> , <b>2015</b> , 32, 226-34  | 3.5  | 49 |
| 529 | Optimisation and evaluation of an electromagnetic tracking device for high-accuracy three-dimensional ultrasound imaging of the carotid arteries. <i>Ultrasound in Medicine and Biology</i> , <b>2001</b> , 27, 957-68  | 3.5  | 49 |
| 528 | Pre-existing polymerase-specific T cells expand in abortive seronegative SARS-CoV-2. <i>Nature</i> , <b>2021</b> ,  | 50.4 | 49 |
| 527 | Opening of small and intermediate calcium-activated potassium channels induces relaxation mainly mediated by nitric-oxide release in large arteries and endothelium-derived hyperpolarizing factor in small arteries from rat. <i>Journal of Pharmacology and Experimental Therapeutics</i> , <b>2011</b> , 339, 842-50 | 4.7  | 48 |
| 526 | Image-based carotid flow reconstruction: a comparison between MRI and ultrasound. <i>Physiological Measurement</i> , <b>2004</b> , 25, 1495-509   | 2.9  | 48 |
| 525 | Accuracy and reproducibility of CFD predicted wall shear stress using 3D ultrasound images. <i>Journal of Biomechanical Engineering</i> , <b>2003</b> , 125, 218-22   | 2.1  | 47 |
| 524 | What is the role of the aorta in directing coronary blood flow?. <i>Heart</i> , <b>2008</b> , 94, 1545-7  | 5.1  | 46 |
| 523 | A comparison between the effects of hydrophobic and hydrophilic statins on osteoclast function in vitro and ovariectomy-induced bone loss in vivo. <i>Calcified Tissue International</i> , <b>2007</b> , 81, 403-13   | 3.9  | 46 |
| 522 | Candesartan- and atenolol-based treatments induce different patterns of carotid artery and left ventricular remodeling in hypertension. <i>Stroke</i> , <b>2006</b> , 37, 2381-4  | 6.7  | 45 |

| 521 | Differences in cardiac microcirculatory wave patterns between the proximal left mainstem and proximal right coronary artery. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2008</b> , 295, H1198-H1205              | 5.2  | 44 |
|-----|---|------|----|
| 520 | Impact of size at birth on the microvasculature: the Avon Longitudinal Study of Parents and Children. <i>Pediatrics</i> , <b>2007</b> , 120, e1225-8  | 7.4  | 44 |
| 519 | A Multicenter, Scan-Rescan, Human and Machine Learning CMR Study to Test Generalizability and Precision in Imaging Biomarker Analysis. <i>Circulation: Cardiovascular Imaging</i> , <b>2019</b> , 12, e009214                                       | 3.9  | 43 |
| 518 | Improvement of a retinal blood vessel segmentation method using the Insight Segmentation and Registration Toolkit (ITK). <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2007</b> , 2007, 892-5 |      | 43 |
| 517 | Differential effects of antihypertensive treatment on the retinal microcirculation: an anglo-scandinavian cardiac outcomes trial substudy. <i>Hypertension</i> , <b>2009</b> , 54, 405-8  | 8.5  | 42 |
| 516 | Activation of endogenous c-Src or a related tyrosine kinase by intracellular (pY)EEI peptide increases voltage-operated calcium channel currents in rabbit ear artery cells. <i>FEBS Letters</i> , <b>1996</b> , 399, 63-6                          | 3.8  | 42 |
| 515 | Effect of Monthly, High-Dose, Long-Term Vitamin D Supplementation on Central Blood Pressure Parameters: A Randomized Controlled Trial Substudy. <i>Journal of the American Heart Association</i> , <b>2017</b> , 6,                                 | 6    | 41 |
| 514 | Comparison of simultaneous measurements of blood pressure by tail-cuff and carotid arterial methods in conscious spontaneously hypertensive and Wistar-Kyoto rats. <i>Clinical and Experimental Hypertension</i> , <b>2006</b> , 28, 57-72          | 2.2  | 41 |
| 513 | Postjunctional alpha 2-adrenoceptors mediate vasoconstriction in human subcutaneous resistance vessels. <i>British Journal of Pharmacology</i> , <b>1989</b> , 97, 829-34   | 8.6  | 41 |
| 512 | Indian Asian men have less peripheral arterial disease than European men for equivalent levels of coronary disease. <i>Atherosclerosis</i> , <b>2007</b> , 193, 204-12  | 3.1  | 40 |
| 511 | NS11021, a novel opener of large-conductance Ca(2+)-activated K(+) channels, enhances erectile responses in rats. <i>British Journal of Pharmacology</i> , <b>2009</b> , 158, 1465-76   | 8.6  | 39 |
| 510 | Determinants of retinal microvascular architecture in normal subjects. <i>Microcirculation</i> , <b>2009</b> , 16, 159-66   | 52.9 | 39 |
| 509 | Evaluation of C-reactive protein prior to and on-treatment as a predictor of benefit from atorvastatin: observations from the Anglo-Scandinavian Cardiac Outcomes Trial. <i>European Heart Journal</i> , <b>2012</b> , 33, 486-94                   | 9.5  | 39 |
| 508 | Effects of elastic compression stockings on wall shear stress in deep and superficial veins of the calf. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2008</b> , 294, H2112-20                                     | 5.2  | 39 |
| 507 | Reconstruction and quantification of the carotid artery bifurcation from 3-D ultrasound images. <i>IEEE Transactions on Medical Imaging</i> , <b>2004</b> , 23, 567-83  | 11.7 | 39 |
| 506 | Quantification and characterisation of arteries in retinal images. <i>Computer Methods and Programs in Biomedicine</i> , <b>2000</b> , 63, 133-46   | 6.9  | 39 |
| 505 | Physical activity, sedentary time and physical capability in early old age: British birth cohort study. <i>PLoS ONE</i> , <b>2015</b> , 10, e0126465  | 3.7  | 39 |
| 504 | An activated-platelet-sensitive nanocarrier enables targeted delivery of tissue plasminogen activator for effective thrombolytic therapy. <i>Journal of Controlled Release</i> , <b>2019</b> , 300, 1-12  | 11.7 | 39 |

## (2014-2013)

| 503 | Contrasting effect of different cardiothoracic operations on echocardiographic right ventricular long axis velocities, and implications for interpretation of post-operative values. <i>International Journal of Cardiology</i> , <b>2013</b> , 165, 151-60                       | 3.2  | 38 |
|-----|---|------|----|
| 502 | Wave propagation and reflection in the canine aorta: analysis using a reservoir-wave approach. <i>Canadian Journal of Cardiology</i> , <b>2011</b> , 27, 389.e1-10  | 3.8  | 38 |
| 501 | When is an optimization not an optimization? Evaluation of clinical implications of information content (signal-to-noise ratio) in optimization of cardiac resynchronization therapy, and how to measure and maximize it. <i>Heart Failure Reviews</i> , <b>2011</b> , 16, 277-90 | 5    | 38 |
| 500 | Differential effects of antihypertensive treatment on left ventricular diastolic function: an ASCOT (Anglo-Scandinavian Cardiac Outcomes Trial) substudy. <i>Journal of the American College of Cardiology</i> , <b>2010</b> , 55, 1875-81  | 15.1 | 38 |
| 499 | Ethnicity and left ventricular diastolic function in hypertension an ASCOT (Anglo-Scandinavian Cardiac Outcomes Trial) substudy. <i>Journal of the American College of Cardiology</i> , <b>2008</b> , 52, 1015-21   | 15.1 | 38 |
| 498 | South Asian men have different patterns of coronary artery disease when compared with European men. <i>International Journal of Cardiology</i> , <b>2008</b> , 129, 406-13  | 3.2  | 38 |
| 497 | Computational modeling of LDL and albumin transport in an in vivo CT image-based human right coronary artery. <i>Journal of Biomechanical Engineering</i> , <b>2009</b> , 131, 021003   | 2.1  | 37 |
| 496 | Retinal vascular lesions in patients of Caucasian and Asian origin with type 2 diabetes: baseline results from the ADVANCE Retinal Measurements (AdRem) study. <i>Diabetes Care</i> , <b>2008</b> , 31, 708-13  | 14.6 | 37 |
| 495 | Multiple pathways for entry of calcium and other divalent cations in a vascular smooth muscle cell line (A7r5). <i>Cell Calcium</i> , <b>1994</b> , 15, 317-30  | 4    | 37 |
| 494 | Ethnic Differences in Associations Between Blood Pressure and Stroke in South Asian and European Men. <i>Hypertension</i> , <b>2015</b> , 66, 481-8   | 8.5  | 36 |
| 493 | The fractal heart - embracing mathematics in the cardiology clinic. <i>Nature Reviews Cardiology</i> , <b>2017</b> , 14, 56-64  | 14.8 | 36 |
| 492 | Thigh fat and muscle each contribute to excess cardiometabolic risk in South Asians, independent of visceral adipose tissue. <i>Obesity</i> , <b>2014</b> , 22, 2071-9  | 8    | 36 |
| 491 | The limit of plausibility for predictors of response: application to biventricular pacing. <i>JACC: Cardiovascular Imaging</i> , <b>2012</b> , 5, 1046-65   | 8.4  | 36 |
| 490 | Role of tyrosine phosphorylation in excitation-contraction coupling in vascular smooth muscle. <i>Acta Physiologica Scandinavica</i> , <b>1998</b> , 164, 457-69  |      | 36 |
| 489 | Accuracy of an electromagnetic three-dimensional ultrasound system for carotid artery imaging. <i>Ultrasound in Medicine and Biology</i> , <b>2001</b> , 27, 1421-5   | 3.5  | 36 |
| 488 | Ethnic differences in associations between fat deposition and incident diabetes and underlying mechanisms: the SABRE study. <i>Obesity</i> , <b>2015</b> , 23, 699-706  | 8    | 35 |
| 487 | Central aortic reservoir-wave analysis improves prediction of cardiovascular events in elderly hypertensives. <i>Hypertension</i> , <b>2015</b> , 65, 629-35  | 8.5  | 35 |
| 486 | Aortic reservoir pressure corresponds to cyclic changes in aortic volume: physiological validation in humans. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>2014</b> , 34, 1597-603  | 9.4  | 35 |

| 485 | Real-time dynamic carbon dioxide administration: a novel treatment strategy for stabilization of periodic breathing with potential application to central sleep apnea. <i>Journal of the American College of Cardiology</i> , <b>2010</b> , 56, 1832-7           | 15.1 | 35 |
|-----|--|------|----|
| 484 | Computational analysis of oxygen transport in the retinal arterial network. <i>Current Eye Research</i> , <b>2009</b> , 34, 945-56   | 2.9  | 35 |
| 483 | Assessing the causal role of body mass index on cardiovascular health in young adults: Mendelian randomization and recall-by-genotype analyses. <i>Circulation</i> , <b>2018</b> , 138, 2187-2201  | 16.7 | 34 |
| 482 | Improvement in coronary blood flow velocity with acute biventricular pacing is predominantly due to an increase in a diastolic backward-travelling decompression (suction) wave. <i>Circulation</i> , <b>2012</b> , 126, 1334-44                                 | 16.7 | 34 |
| 481 | The Antimitogenic Action of the Sulphated Polysaccharide Fucoidan Differs from Heparin in Human Vascular Smooth Muscle Cells. <i>Thrombosis and Haemostasis</i> , <b>2002</b> , 87, 149-154  | 7    | 34 |
| 480 | Thrombospondin-1 differentially induces chemotaxis and DNA synthesis of human venous smooth muscle cells at the receptor-binding level. <i>Journal of Cell Science</i> , <b>2002</b> , 115, 4353-60  | 5.3  | 34 |
| 479 | The action of a dopamine (DA1) receptor agonist, fenoldopam in human vasculature in vivo and in vitro. <i>British Journal of Clinical Pharmacology</i> , <b>1986</b> , 22, 535-40  | 3.8  | 34 |
| 478 | Hypertensive Disorders of Pregnancy and Offspring Cardiac Structure and Function in Adolescence.<br>Journal of the American Heart Association, <b>2016</b> , 5,  | 6    | 34 |
| 477 | Association of Retinopathy and Retinal Microvascular Abnormalities With Stroke and Cerebrovascular Disease. <i>Stroke</i> , <b>2016</b> , 47, 2862-2864  | 6.7  | 32 |
| 476 | A class III semaphorin (Sema3e) inhibits mouse osteoblast migration and decreases osteoclast formation in vitro. <i>Calcified Tissue International</i> , <b>2012</b> , 90, 151-62  | 3.9  | 32 |
| 475 | MR image-based geometric and hemodynamic investigation of the right coronary artery with dynamic vessel motion. <i>Annals of Biomedical Engineering</i> , <b>2010</b> , 38, 2606-20  | 4.7  | 32 |
| 474 | Sex-specific trajectories of measures of cardiovascular health during childhood and adolescence: A prospective cohort study. <i>Atherosclerosis</i> , <b>2018</b> , 278, 190-196   | 3.1  | 32 |
| 473 | Test-retest repeatability of cardiopulmonary exercise test variables in patients with cardiac or respiratory disease. <i>European Journal of Preventive Cardiology</i> , <b>2014</b> , 21, 445-53  | 3.9  | 31 |
| 472 | Platelet-derived growth factor beta-receptors can both promote and inhibit chemotaxis in human vascular smooth muscle cells. <i>Arteriosclerosis, Thrombosis, and Vascular Biology,</i> <b>1997</b> , 17, 2622-9   | 9.4  | 31 |
| 471 | Effects of vasoactive agents on intracellular calcium and force in myometrial and subcutaneous resistance arteries isolated from preeclamptic, pregnant, and nonpregnant woman. <i>American Journal of Obstetrics and Gynecology</i> , <b>2005</b> , 192, 625-32 | 6.4  | 31 |
| 470 | Carotid artery wave intensity in mid- to late-life predicts cognitive decline: the Whitehall II study.<br>European Heart Journal, <b>2019</b> , 40, 2300-2309  | 9.5  | 30 |
| 469 | High Serum Immunoglobulin G and M Levels Predict Freedom From Adverse Cardiovascular Events in Hypertension: A Nested Case-Control Substudy of the Anglo-Scandinavian Cardiac Outcomes Trial. <i>EBioMedicine</i> , <b>2016</b> , 9, 372-380                     | 8.8  | 30 |
| 468 | Influence of pulsatile flow on LDL transport in the arterial wall. <i>Annals of Biomedical Engineering</i> , <b>2007</b> , 35, 1782-90   | 4.7  | 30 |

| 467 | 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> , <b>2017</b> , 18, 75-80  | 2.2  | 29 |
|-----|---|------|----|
| 466 | Cardiac resynchronization therapy: mechanisms of action and scope for further improvement in cardiac function. <i>Europace</i> , <b>2017</b> , 19, 1178-1186  | 3.9  | 29 |
| 465 | Rapid increases in infant adiposity and overweight/obesity in childhood are associated with higher central and brachial blood pressure in early adulthood. <i>Journal of Hypertension</i> , <b>2014</b> , 32, 1789-96   | 1.9  | 29 |
| 464 | Effect of inhibition of tyrosine phosphatases on voltage-operated calcium channel currents in rabbit isolated ear artery cells. <i>British Journal of Pharmacology</i> , <b>1998</b> , 124, 307-16  | 8.6  | 29 |
| 463 | The atrioventricular delay of cardiac resynchronization can be optimized hemodynamically during exercise and predicted from resting measurements. <i>Heart Rhythm</i> , <b>2008</b> , 5, 378-86   | 6.7  | 29 |
| 462 | Comparison between three-dimensional volume-selective turbo spin-echo imaging and two-dimensional ultrasound for assessing carotid artery structure and function. <i>Journal of Magnetic Resonance Imaging</i> , <b>2005</b> , 21, 282-9                                    | 5.6  | 29 |
| 461 | Effects of blood pressure lowering with amlodipine or lisinopril on vascular structure of the common carotid artery. <i>Clinical Science</i> , <b>2001</b> , 101, 455-464   | 6.5  | 29 |
| 460 | p53, p21(WAF1/CIP1), and MDM2 involvement in the proliferation and apoptosis in an in vitro model of conditionally immortalized human vascular smooth muscle cells. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>2000</b> , 20, 973-81                    | 9.4  | 29 |
| 459 | Phosphatidylinositol 3-kinase and focal adhesion kinase are early signals in the growth factor-like responses to thrombospondin-1 seen in human vascular smooth muscle. <i>Arteriosclerosis, Thrombosis, and Vascular Biology,</i> <b>1999</b> , 19, 2133-40                | 9.4  | 29 |
| 458 | Increase in tone and intracellular Ca2+ in rabbit isolated ear artery by platelet-derived growth factor. <i>British Journal of Pharmacology</i> , <b>1995</b> , 114, 138-42   | 8.6  | 29 |
| 457 | Human Vascular Responses to Endothelin-1. <i>Journal of Cardiovascular Pharmacology</i> , <b>1989</b> , 13, S225-22   | 83.1 | 29 |
| 456 | Changes in the behavioural determinants of health during the COVID-19 pandemic: gender, socioeconomic and ethnic inequalities in five British cohort studies. <i>Journal of Epidemiology and Community Health</i> , <b>2021</b> , 75, 1136-1142                             | 5.1  | 29 |
| 455 | Overweight across the life course and adipokines, inflammatory and endothelial markers at age 60-64 years: evidence from the 1946 birth cohort. <i>International Journal of Obesity</i> , <b>2015</b> , 39, 1010-8  | 5.5  | 28 |
| 454 | Atorvastatin treatment is associated with less augmentation of the carotid pressure waveform in hypertension: a substudy of the Anglo-Scandinavian Cardiac Outcome Trial (ASCOT). <i>Hypertension</i> , <b>2009</b> , 54, 1009-13   | 8.5  | 28 |
| 453 | Antiphase oscillations of endothelium and smooth muscle [Ca2+]i in vasomotion of rat mesenteric small arteries. <i>Cell Calcium</i> , <b>2007</b> , 42, 536-47  | 4    | 28 |
| 452 | Left atrial function in heart failure with mid-range ejection fraction differs from that of heart failure with preserved ejection fraction: a 2D speckle-tracking echocardiographic study. <i>European Heart Journal Cardiovascular Imaging</i> , <b>2019</b> , 20, 279-290 | 4.1  | 28 |
| 451 | Change in coronary blood flow after percutaneous coronary intervention in relation to baseline lesion physiology: results of the JUSTIFY-PCI study. <i>Circulation: Cardiovascular Interventions</i> , <b>2015</b> , 8, e001715   | 6    | 27 |
| 450 | Efficiency, reproducibility and agreement of five different hemodynamic measures for optimization of cardiac resynchronization therapy. <i>International Journal of Cardiology</i> , <b>2008</b> , 129, 216-26  | 3.2  | 27 |

| 449 | Polyamines reverse non-steroidal anti-inflammatory drug-induced toxicity in human colorectal cancer cells. <i>Biochemical Journal</i> , <b>2003</b> , 374, 481-8  | 3.8  | 27 |
|-----|---|------|----|
| 448 | Carotid geometry reconstruction: a comparison between MRI and ultrasound. <i>Medical Physics</i> , <b>2003</b> , 30, 3251-61  | 4.4  | 27 |
| 447 | Effect of angiotension II on the expression of the early growth response gene c-fos and DNA synthesis in human vascular smooth muscle cells. <i>Journal of Hypertension</i> , <b>1996</b> , 14, 341-7   | 1.9  | 27 |
| 446 | Circulating Apolipoprotein E Concentration and Cardiovascular Disease Risk: Meta-analysis of Results from Three Studies. <i>PLoS Medicine</i> , <b>2016</b> , 13, e1002146  | 11.6 | 27 |
| 445 | Estimation of CT-derived abdominal visceral and subcutaneous adipose tissue depots from anthropometry in Europeans, South Asians and African Caribbeans. <i>PLoS ONE</i> , <b>2013</b> , 8, e75085  | 3.7  | 27 |
| 444 | Cerebral Blood Flow and Cognitive Functioning in a Community-Based, Multi-Ethnic Cohort: The SABRE Study. <i>Frontiers in Aging Neuroscience</i> , <b>2018</b> , 10, 279  | 5.3  | 27 |
| 443 | Genomic and phenotypic insights from an atlas of genetic effects on DNA methylation. <i>Nature Genetics</i> , <b>2021</b> , 53, 1311-1321   | 36.3 | 27 |
| 442 | Associations Between Prediabetes, by Three Different Diagnostic Criteria, and Incident CVD Differ in South Asians and Europeans. <i>Diabetes Care</i> , <b>2015</b> , 38, 2325-32   | 14.6 | 26 |
| 441 | Urinary proteomic biomarkers to predict cardiovascular events. <i>Proteomics - Clinical Applications</i> , <b>2015</b> , 9, 610-7   | 3.1  | 26 |
| 440 | Midlife hypertensive status and cognitive function 20 years later: the Southall and Brent revisited study. <i>Journal of the American Geriatrics Society</i> , <b>2013</b> , 61, 1489-98  | 5.6  | 26 |
| 439 | High dietary salt intake increases carotid blood pressure and wave reflection in normotensive healthy young men. <i>Journal of Applied Physiology</i> , <b>2011</b> , 110, 468-71   | 3.7  | 26 |
| 438 | Response to Letters Regarding Article, <b>D</b> ifferential Impact of Blood Pressure-Lowering Drugs on Central Aortic Pressure and Clinical Outcomes: Principal Results of the Conduit Artery Function Evaluation (CAFE) Study (Circulation, <b>2006</b> , 114, | 16.7 | 26 |
| 437 | Effect of platelet-derived growth factor on voltage-operated calcium channels in rabbit isolated ear artery cells. <i>British Journal of Pharmacology</i> , <b>1995</b> , 115, 534-8  | 8.6  | 26 |
| 436 | Relaxation and decrease in [Ca2+]i by hydrochlorothiazide in guinea-pig isolated mesenteric arteries. <i>British Journal of Pharmacology</i> , <b>1995</b> , 114, 703-7   | 8.6  | 26 |
| 435 | Wave Intensity Analysis Provides Novel Insights Into Pulmonary Arterial Hypertension and Chronic Thromboembolic Pulmonary Hypertension. <i>Journal of the American Heart Association</i> , <b>2017</b> , 6,   | 6    | 25 |
| 434 | Association between fat mass through adolescence and arterial stiffness: a population-based study from The Avon Longitudinal Study of Parents and Children. <i>The Lancet Child and Adolescent Health</i> , <b>2019</b> , 3, 474-481                            | 14.5 | 25 |
| 433 | Yoga-Based Cardiac Rehabilitation After Acute Myocardial Infarction: A Randomized Trial. <i>Journal of the American College of Cardiology</i> , <b>2020</b> , 75, 1551-1561   | 15.1 | 25 |
| 432 | Improvement in coronary haemodynamics after percutaneous coronary intervention: assessment using instantaneous wave-free ratio. <i>Heart</i> , <b>2013</b> , 99, 1740-8   | 5.1  | 25 |

| 431 | Left-ventricular structure in the Southall And Brent REvisited (SABRE) study: explaining ethnic differences. <i>Hypertension</i> , <b>2013</b> , 61, 1014-20   | 8.5  | 25 |
|-----|--|------|----|
| 430 | Stress phase angle depicts differences in coronary artery hemodynamics due to changes in flow and geometry after percutaneous coronary intervention. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2009</b> , 296, H765-76                   | 5.2  | 25 |
| 429 | Waves in arteries: A review of wave intensity analysis in the systemic and coronary circulations. <i>Artery Research</i> , <b>2008</b> , 2, 51   | 2.2  | 25 |
| 428 | Assembled Columnar Structures from bis-urea Macrocycles. Supramolecular Chemistry, <b>2005</b> , 17, 27-30   | 1.8  | 25 |
| 427 | Sorption of binary gas mixtures in zeolites. Separation and Purification Technology, 1989, 3, 56-64  |      | 25 |
| 426 | Early vascular damage from smoking and alcohol in teenage years: the ALSPAC study. <i>European Heart Journal</i> , <b>2019</b> , 40, 345-353   | 9.5  | 25 |
| 425 | Metformin in adults with type 1 diabetes: Design and methods of REducing with MetfOrmin Vascular Adverse Lesions (REMOVAL): An international multicentre trial. <i>Diabetes, Obesity and Metabolism</i> , <b>2017</b> , 19, 509-516  | 6.7  | 24 |
| 424 | Depressive symptoms are doubled in older British South Asian and Black Caribbean people compared with Europeans: associations with excess co-morbidity and socioeconomic disadvantage. <i>Psychological Medicine</i> , <b>2015</b> , 45, 1861-71                             | 6.9  | 24 |
| 423 | Evaluation of C-reactive protein before and on-treatment as a predictor of benefit of atorvastatin: a cohort analysis from the Anglo-Scandinavian Cardiac Outcomes Trial lipid-lowering arm. <i>Journal of the American College of Cardiology</i> , <b>2013</b> , 62, 717-29 | 15.1 | 24 |
| 422 | Calcium channel regulation in vascular smooth muscle cells: synergistic effects of statins and calcium channel blockers. <i>International Journal of Cardiology</i> , <b>2010</b> , 139, 2-6   | 3.2  | 24 |
| 421 | Genetic variation in complement factor H and risk of coronary heart disease: eight new studies and a meta-analysis of around 48,000 individuals. <i>Atherosclerosis</i> , <b>2010</b> , 213, 184-90  | 3.1  | 24 |
| 420 | The effect of dynamic vessel motion on haemodynamic parameters in the right coronary artery: a combined MR and CFD study. <i>British Journal of Radiology</i> , <b>2009</b> , 82 Spec No 1, S24-32   | 3.4  | 24 |
| 419 | The acute effects of changes to AV delay on BP and stroke volume: potential implications for design of pacemaker optimization protocols. <i>Circulation: Arrhythmia and Electrophysiology</i> , <b>2012</b> , 5, 122   | -304 | 24 |
| 418 | Low wall shear stress predicts subsequent development of wall hypertrophy in lower limb bypass grafts. <i>Artery Research</i> , <b>2009</b> , 3, 32-38   | 2.2  | 24 |
| 417 | Associations between cardiac target organ damage and microvascular dysfunction: the role of blood pressure. <i>Journal of Hypertension</i> , <b>2010</b> , 28, 952-8   | 1.9  | 24 |
| 416 | Reduced endothelial progenitor cells in European and South Asian men with atherosclerosis. <i>European Journal of Clinical Investigation</i> , <b>2007</b> , 37, 35-41   | 4.6  | 24 |
| 415 | Platelet and leukocyte activation, atherosclerosis and inflammation in European and South Asian men. <i>Journal of Thrombosis and Haemostasis</i> , <b>2007</b> , 5, 2036-42   | 15.4 | 24 |
| 414 | Modulation of calcium channels in arterial smooth muscle cells by dihydropyridine enantiomers.<br>Journal of General Physiology, <b>1993</b> , 101, 393-410  | 3.4  | 24 |

| 413 | Know Your Heart: Rationale, design and conduct of a cross-sectional study of cardiovascular structure, function and risk factors in 4500 men and women aged 35-69 years from two Russian cities, 2015-18. <i>Wellcome Open Research</i> , <b>2018</b> , 3, 67 | 4.8  | 24 |
|-----|---|------|----|
| 412 | Augmentation index is not a proxy for wave reflection magnitude: mechanistic analysis using a computational model. <i>Journal of Applied Physiology</i> , <b>2019</b> , 127, 491-500  | 3.7  | 23 |
| 411 | Arterial pressure: agreement between a brachial cuff-based device and radial tonometry. <i>Journal of Hypertension</i> , <b>2014</b> , 32, 865-72   | 1.9  | 23 |
| 410 | Midlife blood pressure change and left ventricular mass and remodelling in older age in the 1946 British Birth Cohort Study. <i>European Heart Journal</i> , <b>2014</b> , 35, 3287-95  | 9.5  | 23 |
| 409 | Long-term antihypertensive treatment fails to improve E/e' despite regression of left ventricular mass: an Anglo-Scandinavian cardiac outcomes trial substudy. <i>Hypertension</i> , <b>2014</b> , 63, 252-8  | 8.5  | 22 |
| 408 | CNP, but not ANP or BNP, relax human isolated subcutaneous resistance arteries by an action involving cyclic GMP and BKCa channels. <i>JRAAS - Journal of the Renin-Angiotensin-Aldosterone System</i> , <b>2006</b> , 7, 87-91                               | 3    | 22 |
| 407 | Operator dependence of 3-D ultrasound-based computational fluid dynamics for the carotid bifurcation. <i>IEEE Transactions on Medical Imaging</i> , <b>2005</b> , 24, 451-6   | 11.7 | 22 |
| 406 | Influence of head position on carotid hemodynamics in young adults. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2004</b> , 287, H1670-81  | 5.2  | 22 |
| 405 | Reproducibility study of 3D geometrical reconstruction of the human carotid bifurcation from magnetic resonance images. <i>Magnetic Resonance in Medicine</i> , <b>2003</b> , 49, 665-74  | 4.4  | 22 |
| 404 | Training for a First-Time Marathon Reverses Age-Related Aortic Stiffening. <i>Journal of the American College of Cardiology</i> , <b>2020</b> , 75, 60-71   | 15.1 | 22 |
| 403 | Oxygen Uptake Efficiency Slope and Breathing Reserve, Not Anaerobic Threshold, Discriminate Between Patients With Cardiovascular Disease Over Chronic Obstructive Pulmonary Disease. <i>JACC: Heart Failure</i> , <b>2016</b> , 4, 252-61                     | 7.9  | 21 |
| 402 | Stem cell therapy for stress urinary incontinence: a systematic review in human subjects. <i>Archives of Gynecology and Obstetrics</i> , <b>2013</b> , 288, 1213-21   | 2.5  | 21 |
| 401 | The effects of weight and physical activity change over 20 years on later-life objective and self-reported disability. <i>International Journal of Epidemiology</i> , <b>2014</b> , 43, 856-65  | 7.8  | 21 |
| 400 | Caution using brachial systolic pressure to calibrate radial tonometric pressure waveforms: lessons from invasive study. <i>Hypertension</i> , <b>2010</b> , 55, e4   | 8.5  | 21 |
| 399 | A novel measure to characterise optimality of diameter relationships at retinal vascular bifurcations. <i>Artery Research</i> , <b>2010</b> , 4, 75-80  | 2.2  | 21 |
| 398 | Dynamic CO2 therapy in periodic breathing: a modeling study to determine optimal timing and dosage regimes. <i>Journal of Applied Physiology</i> , <b>2009</b> , 107, 696-706   | 3.7  | 21 |
| 397 | Molecular and cellular mechanisms of action of angiotensin II (AT1) receptors in vascular smooth muscle. <i>Journal of Human Hypertension</i> , <b>1998</b> , 12, 275-81  | 2.6  | 21 |
| 396 | Flow in carotid bifurcations: effect of the superior thyroid artery. <i>Medical Engineering and Physics</i> , <b>1999</b> , 21, 207-14  | 2.4  | 21 |

| 395         | Birthweight, childhood growth and left ventricular structure at age 60-64 years in a British birth cohort study. <i>International Journal of Epidemiology</i> , <b>2016</b> , 45, 1091-1102  | 7.8  | 20         |
|-------------|--|------|------------|
| 394         | Associations and clinical relevance of aortic-brachial artery stiffness mismatch, aortic reservoir function, and central pressure augmentation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2015</b> , 309, H1225-33   | 5.2  | 20         |
| 393         | Body mass index and height from infancy to adulthood and carotid intima-media thickness at 60 to 64 years in the 1946 British Birth Cohort Study. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>2014</b> , 34, 654-60   | 9.4  | 20         |
| 392         | A computational study on the influence of catheter-delivered intravascular probes on blood flow in a coronary artery model. <i>Journal of Biomechanics</i> , <b>2007</b> , 40, 2501-9  | 2.9  | 20         |
| 391         | Anaphylactoid response to intravenous acetylcysteine. <i>Lancet, The</i> , <b>1992</b> , 339, 1231-2   | 40   | 20         |
| 390         | The impact of health behaviours on incident cardiovascular disease in Europeans and South Asiansa prospective analysis in the UK SABRE study. <i>PLoS ONE</i> , <b>2015</b> , 10, e0117364   | 3.7  | <b>2</b> 0 |
| 389         | Know Your Heart: Rationale, design and conduct of a cross-sectional study of cardiovascular structure, function and risk factors in 4500 men and women aged 35-69 years from two Russian cities, 2015-18. <i>Wellcome Open Research</i> , <b>2018</b> , 3, 67  | 4.8  | 20         |
| 388         | Evaluating access to health and care services during lockdown by the COVID-19 survey in five UK national longitudinal studies. <i>BMJ Open</i> , <b>2021</b> , 11, e045813   | 3    | 20         |
| 387         | A Mock Circulatory System Incorporating a Compliant 3D-Printed Anatomical Model to Investigate Pulmonary Hemodynamics. <i>Artificial Organs</i> , <b>2017</b> , 41, 637-646  | 2.6  | 19         |
| 386         | Novel coronary heart disease risk factors at 60-64 years and life course socioeconomic position: the 1946 British birth cohort. <i>Atherosclerosis</i> , <b>2015</b> , 238, 70-6   | 3.1  | 19         |
| 385         | Association between resting heart rate across the life course and all-cause mortality: longitudinal findings from the Medical Research Council (MRC) National Survey of Health and Development (NSHD). <i>Journal of Epidemiology and Community Health</i> , <b>2014</b> , 68, 883-9                           | 5.1  | 19         |
| 384         | Maximizing efficiency of alternation algorithms for hemodynamic optimization of the AV delay of cardiac resynchronization therapy. <i>PACE - Pacing and Clinical Electrophysiology</i> , <b>2011</b> , 34, 217-25  | 1.6  | 19         |
| 383         | Computational analysis of oxygen transport in a patient-specific model of abdominal aortic aneurysm with intraluminal thrombus. <i>British Journal of Radiology</i> , <b>2009</b> , 82 Spec No 1, S18-23   | 3.4  | 19         |
| 382         | Gender-specific differences in myocardial deformation and aortic stiffness at rest and dobutamine stress. <i>Hypertension</i> , <b>2012</b> , 59, 712-8  | 8.5  | 19         |
| 381         | Arterial pulse wave velocity in coronary arteries. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , <b>2006</b> , 2006, 867-70   |      | 19         |
| <b>3</b> 80 | Rationale and design of the AdRem study: evaluating the effects of blood pressure lowering and intensive glucose control on vascular retinal disorders in patients with type 2 diabetes mellitus. <i>Contemporary Clinical Trials</i> , <b>2007</b> , 28, 6-17   | 2.3  | 19         |
| 379         | Various issues relating to computational fluid dynamics simulations of carotid bifurcation flow based on models reconstructed from three-dimensional ultrasound images. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , <b>2003</b> , 217, 393-403 | 1.7  | 19         |
| 378         | Vein graft stenosis and the heparin responsiveness of human vascular smooth muscle cells. <i>Circulation</i> , <b>1998</b> , 97, 2506-10   | 16.7 | 19         |

| 377 | Action of AT1 receptor antagonists on angiotensin II-induced tone in human isolated subcutaneous resistance arteries. <i>British Journal of Pharmacology</i> , <b>1999</b> , 127, 1876-82   | 8.6                | 19 |
|-----|---|--------------------|----|
| 376 | Action of angiotensin II, 5-hydroxytryptamine and adenosine triphosphate on ionic currents in single ear artery cells of the rabbit. <i>British Journal of Pharmacology</i> , <b>1995</b> , 116, 2148-54  | 8.6                | 19 |
| 375 | The action of beta-adrenoceptor agonists on acid secretion by the rat isolated stomach. <i>Journal of Physiology</i> , <b>1981</b> , 316, 23-31   | 3.9                | 19 |
| 374 | Bullseye's representation of cerebral white matter hyperintensities. <i>Journal of Neuroradiology</i> , <b>2018</b> , 45, 114-122   | 3.1                | 19 |
| 373 | Reservoir pressure analysis of aortic blood pressure: an in-vivo study at five locations in humans.<br>Journal of Hypertension, <b>2017</b> , 35, 2025-2033   | 1.9                | 18 |
| 372 | Associations between high blood pressure and DNA methylation. <i>PLoS ONE</i> , <b>2020</b> , 15, e0227728  | 3.7                | 18 |
| 371 | Role of MRI in investigating the effects of elastic compression stockings on the deformation of the superficial and deep veins in the lower leg. <i>Journal of Magnetic Resonance Imaging</i> , <b>2007</b> , 26, 80-5                              | 5.6                | 18 |
| 370 | Drug effects on the mechanical properties of large arteries in humans. <i>Clinical and Experimental Pharmacology and Physiology</i> , <b>2007</b> , 34, 688-93  | 3                  | 18 |
| 369 | Neurally evoked responses of human isolated resistance arteries are mediated by both alpha 1- and alpha 2-adrenoceptors. <i>British Journal of Pharmacology</i> , <b>1992</b> , 106, 568-73   | 8.6                | 18 |
| 368 | Age-specific reference values for carotid arterial stiffness estimated by ultrasonic wall tracking. <i>Journal of Human Hypertension</i> , <b>2020</b> , 34, 214-222  | 2.6                | 18 |
| 367 | Regulation of phospholipase C-delta by GTP-binding proteins-rhoA as an inhibitory modulator. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , <b>1998</b> , 1403, 97-101  | 4.9                | 17 |
| 366 | Effect of serum withdrawal on the contribution of L-type calcium channels (CaV1.2) to intracellular Ca2+ responses and chemotaxis in cultured human vascular smooth muscle cells. <i>British Journal of Pharmacology</i> , <b>2005</b> , 145, 811-7 | 8.6                | 17 |
| 365 | The involvement of intracellular Ca(2+) in 5-HT(1B/1D) receptor-mediated contraction of the rabbit isolated renal artery. <i>British Journal of Pharmacology</i> , <b>2000</b> , 130, 835-42  | 8.6                | 17 |
| 364 | Inhibition of norepinephrine and caffeine-induced activation by ryanodine and thapsigargin in rat mesenteric arteries. <i>Journal of Cardiovascular Pharmacology</i> , <b>1995</b> , 25, 840-6  | 3.1                | 17 |
| 363 | Size and site-dependent heterogeneity of human vascular responses in vitro. <i>Journal of Hypertension</i> , <b>1988</b> , 6, S173-5  | 1.9                | 17 |
| 362 | Improved Exercise-Related Skeletal Muscle Oxygen Consumption Following Uptake of Endurance Training Measured Using Near-Infrared Spectroscopy. <i>Frontiers in Physiology</i> , <b>2017</b> , 8, 1018   | 4.6                | 16 |
| 361 | Cardiac resynchronization therapy and AV optimization increase myocardial oxygen consumption, but increase cardiac function more than proportionally. <i>International Journal of Cardiology</i> , <b>2014</b> , 171, 144-52                        | 3.2                | 16 |
| 360 | Indian Asians have poorer cardiovascular autonomic function than Europeans: this is due to greater hyperglycaemia and may contribute to their greater risk of heart disease. <i>Diabetologia</i> , <b>2010</b> , 53, 2120-                          | -8 <sup>10.3</sup> | 16 |

| 359 | Differential effects of lovastatin on mitogen induced calcium influx in human cultured vascular smooth muscle cells. <i>British Journal of Pharmacology</i> , <b>1997</b> , 121, 1789-95   | 8.6  | 16 |  |
|-----|--|------|----|--|
| 358 | Left ventricular hypertrophy induced by aortic banding impairs relaxation of isolated coronary arteries. <i>Clinical Science</i> , <b>2007</b> , 113, 473-8  | 6.5  | 16 |  |
| 357 | The mechanism of action of alpha 2-adrenoceptors in human isolated subcutaneous resistance arteries. <i>British Journal of Pharmacology</i> , <b>1995</b> , 115, 1463-8  | 8.6  | 16 |  |
| 356 | Evidence that agonist and antagonist enantiomers of the dihydropyridine PN 202-791 act at different sites on the voltage-dependent calcium channel of vascular muscle. <i>British Journal of Pharmacology</i> , <b>1990</b> , 101, 3-5 | 8.6  | 16 |  |
| 355 | Data on trajectories of measures of cardiovascular health in the Avon Longitudinal Study of Parents and Children (ALSPAC). <i>Data in Brief</i> , <b>2019</b> , 23, 103687   | 1.2  | 15 |  |
| 354 | Influence of Age on Upper Arm Cuff Blood Pressure Measurement. <i>Hypertension</i> , <b>2020</b> , 75, 844-850   | 8.5  | 15 |  |
| 353 | Endothelial nitric oxide synthase is not essential for nitric oxide production by osteoblasts subjected to fluid shear stress in vitro. <i>Calcified Tissue International</i> , <b>2013</b> , 92, 228-39                               | 3.9  | 15 |  |
| 352 | Evidence-based recommendations for PISA measurements in mitral regurgitation: systematic review, clinical and in-vitro study. <i>International Journal of Cardiology</i> , <b>2013</b> , 168, 1220-8                                   | 3.2  | 15 |  |
| 351 | Multinational evaluation of the interpretability of the iterative method of optimisation of AV delay for CRT. <i>International Journal of Cardiology</i> , <b>2013</b> , 168, 407-13   | 3.2  | 15 |  |
| 350 | Hyperglycemia has a greater impact on left ventricle function in South Asians than in Europeans. <i>Diabetes Care</i> , <b>2014</b> , 37, 1124-31  | 14.6 | 15 |  |
| 349 | Ethnic differences in retinal microvascular structure. <i>Diabetologia</i> , <b>2008</b> , 51, 1719-22   | 10.3 | 15 |  |
| 348 | Carotid angioplasty in a pulsatile flow model: factors affecting embolic potential. <i>European Journal of Vascular and Endovascular Surgery</i> , <b>2003</b> , 26, 22-31   | 2.3  | 15 |  |
| 347 | Effects of blood pressure lowering with amlodipine or lisinopril on vascular structure of the common carotid artery. <i>Clinical Science</i> , <b>2001</b> , 101, 455  | 6.5  | 15 |  |
| 346 | Mechanism of action of angiotensin II in human isolated subcutaneous resistance arteries. <i>British Journal of Pharmacology</i> , <b>2001</b> , 134, 188-96   | 8.6  | 15 |  |
| 345 | Measurement of hemodynamics in human carotid artery using ultrasound and computational fluid dynamics. <i>Journal of Applied Physiology</i> , <b>2002</b> , 92, 957-61   | 3.7  | 15 |  |
| 344 | . European Journal of Cardiovascular Prevention and Rehabilitation, <b>2002</b> , 9, 77-81   |      | 15 |  |
| 343 | Lipoprotein signatures of cholesteryl ester transfer protein and HMG-CoA reductase inhibition. <i>PLoS Biology</i> , <b>2019</b> , 17, e3000572  | 9.7  | 15 |  |
| 342 | Cortical cerebral blood flow in ageing: effects of haematocrit, sex, ethnicity and diabetes. <i>European Radiology</i> , <b>2019</b> , 29, 5549-5558   | 8    | 14 |  |

| 341 | Associations of Y chromosomal haplogroups with cardiometabolic risk factors and subclinical vascular measures in males during childhood and adolescence. <i>Atherosclerosis</i> , <b>2018</b> , 274, 94-103  | 3.1  | 14 |
|-----|--|------|----|
| 340 | Prognostic implications of left ventricular strain by speckle-tracking echocardiography in the general population: a meta-analysis. <i>Vascular Health and Risk Management</i> , <b>2019</b> , 15, 229-251   | 4.4  | 14 |
| 339 | A randomized placebo controlled double blind crossover study of pioglitazone on left ventricular diastolic function in type 2 diabetes. <i>International Journal of Cardiology</i> , <b>2013</b> , 167, 1329-32  | 3.2  | 14 |
| 338 | Serum amyloid A, C-reactive protein, and retinal microvascular changes in hypertensive diabetic and nondiabetic individuals: an Anglo-Scandinavian Cardiac Outcomes Trial (ASCOT) substudy. <i>Diabetes Care</i> , <b>2009</b> , 32, 1098-100  | 14.6 | 14 |
| 337 | Retinal arterioles have impaired reactivity to hyperoxia in type 1 diabetes. <i>Acta Ophthalmologica</i> , <b>2010</b> , 88, 453-7   | 3.7  | 14 |
| 336 | Evidence of improved regional myocardial function in patients with chronic stable angina and apparent normal ventricular functiona tissue Doppler study before and after percutaneous coronary intervention. <i>Journal of the American Society of Echocardiography</i> , <b>2009</b> , 22, 177-82 | 5.8  | 14 |
| 335 | Role of intracellular calcium ([Ca2+]i) and tyrosine phosphorylation in adhesion of cultured vascular smooth muscle cells to fibrinogen. <i>Cardiovascular Research</i> , <b>1998</b> , 39, 475-84   | 9.9  | 14 |
| 334 | Adverse effect of diabetes and hyperglycaemia on arterial stiffness in Europeans, South Asians, and African Caribbeans in the SABRE study. <i>Journal of Hypertension</i> , <b>2016</b> , 34, 282-9  | 1.9  | 14 |
| 333 | Effectiveness and cost-effectiveness of a Yoga-based Cardiac Rehabilitation (Yoga-CaRe) program following acute myocardial infarction: Study rationale and design of a multi-center randomized controlled trial. <i>International Journal of Cardiology</i> , <b>2019</b> , 280, 14-18             | 3.2  | 14 |
| 332 | Determinants of Intima-Media Thicknesslin the Young: The ALSPAC Study. <i>JACC: Cardiovascular Imaging</i> , <b>2021</b> , 14, 468-478   | 8.4  | 14 |
| 331 | Cardiovascular Risk Factors and White Matter Hyperintensities: Difference in Susceptibility in South Asians Compared With Europeans. <i>Journal of the American Heart Association</i> , <b>2018</b> , 7, e010533   | 6    | 14 |
| 330 | Impact of pulmonary endarterectomy on pulmonary arterial wave propagation and reservoir function. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2019</b> , 317, H505-H516  | 5.2  | 13 |
| 329 | Circulating Fatty Acids and Risk of Coronary Heart Disease and Stroke: Individual Participant Data Meta-Analysis in Up to 16 26 Participants. <i>Journal of the American Heart Association</i> , <b>2020</b> , 9, e013131  | 6    | 13 |
| 328 | Attenuation of reflected waves in man during retrograde propagation from femoral artery to proximal aorta. <i>International Journal of Cardiology</i> , <b>2016</b> , 202, 441-5   | 3.2  | 13 |
| 327 | Patient-specific coronary stenoses can be modeled using a combination of OCT and flow velocities to accurately predict hyperemic pressure gradients. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2014</b> , 61, 1902-13  | 5    | 13 |
| 326 | Differential effects of adiposity and childhood growth trajectories on retinal microvascular architecture. <i>Microcirculation</i> , <b>2013</b> , 20, 609-16  | 2.9  | 13 |
| 325 | Why does primary angioplasty not work in registries? Quantifying the susceptibility of real-world comparative effectiveness data to allocation bias. <i>Circulation: Cardiovascular Quality and Outcomes</i> , <b>2012</b> , 5, 759-66   | 5.8  | 13 |
| 324 | The reservoir-wave paradigm. <i>Journal of Hypertension</i> , <b>2012</b> , 30, 1880-1; author reply 1881-3  | 1.9  | 13 |

| 323 | Attenuation of microvascular function in those with cardiovascular disease is similar in patients of Indian Asian and European descent. <i>BMC Cardiovascular Disorders</i> , <b>2010</b> , 10, 3  | 2.3 | 13 |
|-----|--|-----|----|
| 322 | Src family tyrosine kinases mediate contraction of rat isolated tail arteries in response to a hyposmotic stimulus. <i>Journal of Hypertension</i> , <b>2007</b> , 25, 1871-8  | 1.9 | 13 |
| 321 | Tyrosine kinases act directly on the alpha1 subunit to modulate Ca(v)2.2 calcium channels. <i>Biochemical and Biophysical Research Communications</i> , <b>2002</b> , 290, 1246-9  | 3.4 | 13 |
| 320 | Comparison of effects of platelet-derived growth factor isoforms on signaling and DNA synthesis of human cultured saphenous vein cells. <i>Journal of Cardiovascular Pharmacology</i> , <b>1995</b> , 25, 481-5  | 3.1 | 13 |
| 319 | Endocrine cell hyperplasia and appendiceal carcinoids. <i>Journal of Pathology</i> , <b>1988</b> , 156, 325-9  | 9.4 | 13 |
| 318 | Know Your Heart: Rationale, design and conduct of a cross-sectional study of cardiovascular structure, function and risk factors in 4500 men and women aged 35-69 years from two Russian cities, 2015-18. <i>Wellcome Open Research</i> ,3, 67                                   | 4.8 | 13 |
| 317 | Perillyl alcohol, an inhibitor of geranylgeranyl transferase, induces apoptosis of immortalized human vascular smooth muscle cells in vitro. <i>Journal of Cardiovascular Pharmacology</i> , <b>2000</b> , 35, 341-4   | 3.1 | 13 |
| 316 | Ethnic differences in cross-sectional associations between impaired glucose regulation, identified by oral glucose tolerance test or HbA1c values, and cardiovascular disease in a cohort of European and South Asian origin. <i>Diabetic Medicine</i> , <b>2016</b> , 33, 340-7 | 3.5 | 13 |
| 315 | Estimation of Maximal Oxygen Consumption and Heart Rate Recovery Using the Tecumseh Sub-Maximal Step Test and their Relationship to Cardiovascular Risk Factors. <i>Artery Research</i> , <b>2017</b> , 18, 29-35  | 2.2 | 12 |
| 314 | Impact of blood pressure on retinal microvasculature architecture across the lifespan: the Young Finns Study. <i>Microcirculation</i> , <b>2015</b> , 22, 146-55   | 2.9 | 12 |
| 313 | Attenuated systemic microvascular function in men with coronary artery disease is associated with angina but not explained by atherosclerosis. <i>Microcirculation</i> , <b>2013</b> , 20, 670-7   | 2.9 | 12 |
| 312 | Development of lysolipid-based thermosensitive liposomes for delivery of high molecular weight proteins. <i>International Journal of Pharmaceutics</i> , <b>2011</b> , 421, 291-2  | 6.5 | 12 |
| 311 | South Asians have adverse cerebrovascular haemodynamics, despite equivalent blood pressure, compared with Europeans. This is due to their greater hyperglycaemia. <i>International Journal of Epidemiology</i> , <b>2011</b> , 40, 1490-8  | 7.8 | 12 |
| 310 | Acute effects of oxygen and carbon dioxide on retinal vascular network geometry in hypertensive and normotensive subjects. <i>Clinical Science</i> , <b>2000</b> , 99, 483   | 6.5 | 12 |
| 309 | p53, p21(WAF1/CIP1), and MDM2 involvement in proliferation and apoptosis in an in vitro model of conditionally immortalized human vascular smooth muscle cells. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>2000</b> , 20, 636-44                             | 9.4 | 12 |
| 308 | Structural changes in the cardiovascular system of untreated essential hypertensives. <i>Blood Pressure</i> , <b>1995</b> , 4, 42-7  | 1.7 | 12 |
| 307 | The effect of atrial natriuretic peptide on human isolated resistance arteries. <i>British Journal of Pharmacology</i> , <b>1989</b> , 97, 1027-30   | 8.6 | 12 |
| 306 | No evidence for a direct vasodilatory effect of celiprolol on human vasculature in vivo or in vitro.<br>Journal of Cardiovascular Pharmacology, <b>1987</b> , 10, 589-92   | 3.1 | 12 |

| 305 | The Association of Type 2 Diabetes Mellitus with Cerebral Gray Matter Volume Is Independent of Retinal Vascular Architecture and Retinopathy. <i>Journal of Diabetes Research</i> , <b>2016</b> , 2016, 6328953  | 3.9  | 12 |
|-----|--|------|----|
| 304 | Impact of fetal growth and preterm birth on the retinal microvasculature in mid-adulthood. <i>Microcirculation</i> , <b>2015</b> , 22, 285-93  | 2.9  | 11 |
| 303 | Patterns of adiposity, vascular phenotypes and cognitive function in the 1946 British Birth Cohort. <i>BMC Medicine</i> , <b>2018</b> , 16, 75   | 11.4 | 11 |
| 302 | Applicability of the iterative technique for cardiac resynchronization therapy optimization: full-disclosure, 50-sequential-patient dataset of transmitral Doppler traces, with implications for future research design and guidelines. <i>Europace</i> , <b>2014</b> , 16, 541-50 | 3.9  | 11 |
| 301 | African Caribbeans have greater subclinical cerebrovascular disease than Europeans: this is associated with both their elevated resting and ambulatory blood pressure and their hyperglycaemia. <i>Journal of Hypertension</i> , <b>2013</b> , 31, 2391-9                          | 1.9  | 11 |
| 300 | Comparison of the retinal microvasculature in European and African-Caribbean people with diabetes. <i>Clinical Science</i> , <b>2009</b> , 117, 229-36   | 6.5  | 11 |
| 299 | Ethnic differences in heart rate: can these be explained by conventional cardiovascular risk factors?. <i>Clinical Autonomic Research</i> , <b>2008</b> , 18, 90-5   | 4.3  | 11 |
| 298 | An intensive phenotyping study to enable the future examination of genetic influences on hypertension-associated cardiovascular disease. <i>Journal of Human Hypertension</i> , <b>2001</b> , 15 Suppl 1, S13-8  | 32.6 | 11 |
| 297 | Enhanced tissue polyamine content in the spontaneously hypertensive rat. <i>Clinical and Experimental Pharmacology and Physiology</i> , <b>1996</b> , 23, 410-4  | 3    | 11 |
| 296 | The action of amlodipine on voltage-operated calcium channels in vascular smooth muscle. <i>British Journal of Pharmacology</i> , <b>1993</b> , 109, 120-5   | 8.6  | 11 |
| 295 | Role of polyamines in hypertension induced by angiotensin II. <i>Cardiovascular Research</i> , <b>1995</b> , 29, 50-56   | 9.9  | 11 |
| 294 | Changes in the behavioural determinants of health during the coronavirus (COVID-19) pandemic: gender, socioeconomic and ethnic inequalities in 5 British cohort studies  |      | 11 |
| 293 | A review of wave mechanics in the pulmonary artery with an emphasis on wave intensity analysis. <i>Acta Physiologica</i> , <b>2016</b> , 218, 239-249  | 5.6  | 11 |
| 292 | Yoga and Cardiovascular Health Trial (YACHT): a UK-based randomised mechanistic study of a yoga intervention plus usual care versus usual care alone following an acute coronary event. <i>BMJ Open</i> , <b>2019</b> , 9, e030119   | 3    | 11 |
| 291 | Feasibility and Validity of Computed Tomography-Derived Fractional Flow Reserve in Patients With Severe Aortic Stenosis: The CAST-FFR Study. <i>Circulation: Cardiovascular Interventions</i> , <b>2021</b> , 14, e009586  | 6    | 11 |
| 290 | Optimality, Cost Minimization and the Design of Arterial Networks. <i>Artery Research</i> , <b>2015</b> , 10, 1-10   | 2.2  | 10 |
| 289 | Identification of capillary rarefaction using intracoronary wave intensity analysis with resultant prognostic implications for cardiac allograft patients. <i>European Heart Journal</i> , <b>2018</b> , 39, 1807-1814   | 9.5  | 10 |
| 288 | Midlife blood pressure predicts future diastolic dysfunction independently of blood pressure. <i>Heart</i> , <b>2016</b> , 102, 1380-7   | 5.1  | 10 |

| 287 | Fully automatable, reproducible, noninvasive simple plethysmographic optimization: proof of concept and potential for implantability. <i>PACE - Pacing and Clinical Electrophysiology</i> , <b>2012</b> , 35, 948-60  | 1.6           | 10 |
|-----|---|---------------|----|
| 286 | Assessment of Exercise Capacity and Oxygen Consumption Using a 6 min Stepper Test in Older Adults. <i>Frontiers in Pharmacology</i> , <b>2017</b> , 8, 408  | 5.6           | 10 |
| 285 | Towards an understanding of the release behavior of temperature-sensitive liposomes: a possible explanation of the "pseudoequilibrium" release behavior at the phase transition temperature.<br>Journal of Liposome Research, 2013, 23, 167-73                          | 6.1           | 10 |
| 284 | Action of angiotensin II on DNA synthesis by human saphenous vein in organ culture. <i>Hypertension</i> , <b>2000</b> , 36, 917-21  | 8.5           | 10 |
| 283 | Hypertension and blood vessels. <i>British Medical Bulletin</i> , <b>1994</b> , 50, 356-70  | 5.4           | 10 |
| 282 | Dopamine produces forearm vasodilatation following alpha-adrenoceptor blockade by an action on vascular dopamine (DA1) receptors in man. <i>Journal of Hypertension</i> , <b>1987</b> , 5, 337-40   | 1.9           | 10 |
| 281 | Elevated Blood Pressure in Adolescence Is Attributable to a Combination of Elevated Cardiac Output and Total Peripheral Resistance. <i>Hypertension</i> , <b>2018</b> , 72, 1103-1108   | 8.5           | 10 |
| 280 | A method for determining local pulse wave velocity in human ascending aorta from sequential ultrasound measurements of diameter and velocity. <i>Physiological Measurement</i> , <b>2018</b> , 39, 114009   | 2.9           | 10 |
| 279 | Associations Between Left Ventricular Dysfunction and Brain Structure and Function: Findings From the SABRE (Southall and Brent Revisited) Study. <i>Journal of the American Heart Association</i> , <b>2017</b> , 6,   | 6             | 9  |
| 278 | Development of a Yoga-Based Cardiac Rehabilitation (Yoga-CaRe) Programme for Secondary Prevention of Myocardial Infarction. <i>Evidence-based Complementary and Alternative Medicine</i> , <b>2019</b> , 2019, 7470184  | 2.3           | 9  |
| 277 | Genetic aetiology of blood pressure relates to aortic stiffness with bi-directional causality: evidence from heritability, blood pressure polymorphisms, and Mendelian randomization. <i>European Heart Journal</i> , <b>2020</b> , 41, 3314-3322                       | 9.5           | 9  |
| 276 | The modified arterial reservoir: An update with consideration of asymptotic pressure () and zero-flow pressure (). <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , <b>2020</b> , 234, 1288-1299             | 1.7           | 9  |
| 275 | The delirium and population health informatics cohort study protocol: ascertaining the determinants and outcomes from delirium in a whole population. <i>BMC Geriatrics</i> , <b>2018</b> , 18, 45  | 4.1           | 9  |
| 274 | Estimation of coronary wave intensity analysis using noninvasive techniques and its application to exercise physiology. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2016</b> , 310, H619-7  | 2 <b>7</b> .2 | 9  |
| 273 | Multicenter Randomized Controlled Crossover Trial Comparing Hemodynamic Optimization Against Echocardiographic Optimization of AV and VV Delay of Cardiac Resynchronization Therapy: The BRAVO Trial. <i>JACC: Cardiovascular Imaging</i> , <b>2019</b> , 12, 1407-1416 | 8.4           | 9  |
| 272 | The importance of wave reflection: A comparison of wave intensity analysis and separation of pressure into forward and backward components. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society Annual</i>                       | 0.9           | 9  |
| 271 | The association of nonalcoholic fatty liver disease with central and peripheral blood pressure in adolescence: findings from a cross-sectional study. <i>Journal of Hypertension</i> , <b>2015</b> , 33, 546-52; discussion 553   | 1.9           | 9  |
| 270 | Evidence that conflict regarding size of haemodynamic response to interventricular delay optimization of cardiac resynchronization therapy may arise from differences in how atrioventricular delay is kept constant. <i>Europace</i> , <b>2015</b> , 17, 1823-33       | 3.9           | 9  |

| 269 | Only weak vasorelaxant properties of loop diuretics in isolated resistance arteries from man, rat and guinea pig. <i>European Journal of Pharmacology</i> , <b>2003</b> , 466, 281-7  | 5.3   | 9 |
|-----|---|-------|---|
| 268 | Is carotid artery intima-media thickening a reliable marker of early atherosclerosis?. <i>European Journal of Cardiovascular Prevention and Rehabilitation</i> , <b>2002</b> , 9, 77-81   |       | 9 |
| 267 | Action of an HMG CoA reductase inhibitor, lovastatin, on apoptosis of untransformed and ts-SV40 transformed human smooth muscle cells derived from saphenous vein. <i>Journal of Cardiovascular Pharmacology</i> , <b>2001</b> , 38, 161-73                             | 3.1   | 9 |
| 266 | Characterization of [3H]-heparin binding in human vascular smooth muscle cells and its relationship to the inhibition of DNA synthesis. <i>British Journal of Pharmacology</i> , <b>1999</b> , 127, 361-8   | 8.6   | 9 |
| 265 | Triglyceride-containing lipoprotein sub-fractions and risk of coronary heart disease and stroke: A prospective analysis in 11,560 adults. <i>European Journal of Preventive Cardiology</i> , <b>2020</b> , 27, 1617-1626  | 3.9   | 9 |
| 264 | Feasibility and reproducibility of left ventricular rotation by speckle tracking echocardiography in elderly individuals and the impact of different software. <i>PLoS ONE</i> , <b>2013</b> , 8, e75098  | 3.7   | 9 |
| 263 | Covid-19 Effects on ARTErial Stiffness and Vascular AgeiNg: CARTESIAN Study Rationale and Protocol <i>Artery Research</i> , <b>2020</b> , 27, 59  | 2.2   | 9 |
| 262 | Presence and mechanism of direct vascular effects of amiloride in humans. <i>Journal of Cardiovascular Pharmacology</i> , <b>1999</b> , 34, 388-93  | 3.1   | 9 |
| 261 | Non-invasive assessment of ventriculo-arterial coupling using aortic wave intensity analysis combining central blood pressure and phase-contrast cardiovascular magnetic resonance. <i>European Heart Journal Cardiovascular Imaging</i> , <b>2020</b> , 21, 805-813    | 4.1   | 9 |
| 260 | Impact of Ideal Cardiovascular Health in Childhood on the Retinal Microvasculature in Midadulthood: Cardiovascular Risk in Young Finns Study. <i>Journal of the American Heart Association</i> , <b>2018</b> , 7, e009487   | 6     | 9 |
| 259 | Blood transcriptional biomarkers of acute viral infection for detection of pre-symptomatic SARS-CoV-2 infection: a nested, case-control diagnostic accuracy study. <i>Lancet Microbe, The</i> , <b>2021</b> , 2, e508-e517  | 22.2  | 9 |
| 258 | Mathematical Modelling of Intravenous Thrombolysis in Acute Ischaemic stroke: Effects of Dose Regimens on Levels of Fibrinolytic Proteins and Clot Lysis Time. <i>Pharmaceutics</i> , <b>2019</b> , 11,   | 6.4   | 8 |
| 257 | Impact of chronic hypoxia on proximal pulmonary artery wave propagation and mechanical properties in rats. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2018</b> , 314, H1264-H  | 15278 | 8 |
| 256 | Comparison of the effects of antihypertensive treatment with angiotensin II blockade and beta-blockade on carotid wall structure and haemodynamics: protocol and baseline demographics.<br>JRAAS - Journal of the Renin-Angiotensin-Aldosterone System, 2002, 3, 116-22 | 3     | 8 |
| 255 | Thrombospondin-1 induces DNA synthesis and migration in human vascular smooth muscle cells. <i>Biochemical Society Transactions</i> , <b>1996</b> , 24, 446S  | 5.1   | 8 |
| 254 | Action of heparin and ruthenium red on responses of reversibly-permeabilised rat mesenteric arteries. <i>European Journal of Pharmacology</i> , <b>1994</b> , 268, 319-25   |       | 8 |
| 253 | Specific binding of 125I SCH 23982, a selective dopamine (D1) receptor ligand to plasma membranes derived from human kidney cortex. <i>Biochemical Pharmacology</i> , <b>1989</b> , 38, 781-5   | 6     | 8 |
| 252 | The UK Coronavirus Job Retention Scheme and changes in diet, physical activity and sleep during the COVID-19 pandemic: Evidence from eight longitudinal studies   |       | 8 |

## (2020-2019)

| 251 | Application of the DILEMMA score to improve lesion selection for invasive physiological assessment. <i>Catheterization and Cardiovascular Interventions</i> , <b>2019</b> , 94, E96-E103  | 2.7              | 8 |  |
|-----|---|------------------|---|--|
| 250 | Masked hypertension and submaximal exercise blood pressure among adolescents from the Avon Longitudinal Study of Parents and Children (ALSPAC). <i>Scandinavian Journal of Medicine and Science in Sports</i> , <b>2020</b> , 30, 25-30   | 4.6              | 8 |  |
| 249 | The relationship between pubertal timing and markers of vascular and cardiac structure and function in men and women aged 60-64 years. <i>Scientific Reports</i> , <b>2019</b> , 9, 11037   | 4.9              | 7 |  |
| 248 | Linking phospholipase C isoforms with differentiation function in human vascular smooth muscle cells. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , <b>2013</b> , 1833, 3006-3012  | 4.9              | 7 |  |
| 247 | Pulmonary artery wave propagation and reservoir function in conscious man: impact of pulmonary vascular disease, respiration and dynamic stress tests. <i>Journal of Physiology</i> , <b>2017</b> , 595, 6463-6476  | 3.9              | 7 |  |
| 246 | A new automated system to identify a consistent sampling position to make tissue Doppler and transmitral Doppler measurements of E, E' and E/E'. <i>International Journal of Cardiology</i> , <b>2012</b> , 155, 394-   | 9 <sup>3.2</sup> | 7 |  |
| 245 | Commentary: 'On the cards': collective investigation of disease and medical life histories in the nineteenth century. <i>International Journal of Epidemiology</i> , <b>2013</b> , 42, 683-8  | 7.8              | 7 |  |
| 244 | Reservoir-wave separation and wave intensity analysis applied to carotid arteries: a hybrid 1D model to understand haemodynamics. Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International | 0.9              | 7 |  |
| 243 | Inhibition of Src family tyrosine kinases prevents lipopolysaccharide-induced hyporeactivity in isolated rat tail arteries. <i>Vascular Pharmacology</i> , <b>2007</b> , 46, 195-200  | 5.9              | 7 |  |
| 242 | Wave intensity analysis: a novel non-invasive method for determining arterial wave transmission   |                  | 7 |  |
| 241 | Intravascular pressure-evoked changes in intracellular calcium [Ca2+]i and tone in rat mesenteric and rabbit cerebral arteries in vitro. <i>Journal of Human Hypertension</i> , <b>1999</b> , 13, 855-8   | 2.6              | 7 |  |
| 240 | Action of dopamine on isolated human saphenous veins. <i>Journal of Cardiovascular Pharmacology</i> , <b>1988</b> , 11, 373-7   | 3.1              | 7 |  |
| 239 | Effect of nifedipine and glyceryl trinitrate on retinal blood flow in normal subjects. <i>Journal of Human Hypertension</i> , <b>1993</b> , 7, 399-401  | 2.6              | 7 |  |
| 238 | Microcirculatory rarefaction in South Asians - a potential mechanism for increased cardiovascular risk and diabetes. <i>PLoS ONE</i> , <b>2013</b> , 8, e76680  | 3.7              | 7 |  |
| 237 | Life Course Socioeconomic Position: Associations with Cardiac Structure and Function at Age 60-64 Years in the 1946 British Birth Cohort. <i>PLoS ONE</i> , <b>2016</b> , 11, e0152691  | 3.7              | 7 |  |
| 236 | Cholesteryl ester transfer protein (CETP) as a drug target for cardiovascular disease. <i>Nature Communications</i> , <b>2021</b> , 12, 5640  | 17.4             | 7 |  |
| 235 | Genomic and phenomic insights from an atlas of genetic effects on DNA methylation   |                  | 7 |  |
| 234 | Cohort Profile Update: Southall and Brent Revisited (SABRE) study: a UK population-based comparison of cardiovascular disease and diabetes in people of European, South Asian and African Caribbean heritage. <i>International Journal of Epidemiology</i> , <b>2020</b> , 49, 1441-1442e       | 7.8              | 7 |  |

| 233 | Fibrinogen-mimicking, multiarm nanovesicles for human thrombus-specific delivery of tissue plasminogen activator and targeted thrombolytic therapy. <i>Science Advances</i> , <b>2021</b> , 7,                                      | 14.3 | 7 |
|-----|---|------|---|
| 232 | Effects of bariatric surgery on retinal microvascular architecture in obese patients. <i>International Journal of Obesity</i> , <b>2019</b> , 43, 1675-1680   | 5.5  | 7 |
| 231 | Reconstruction of blood flow patterns in a human carotid bifurcation: A combined CFD and MRI study <b>2000</b> , 11, 299  |      | 7 |
| 230 | The antimitogenic action of the sulphated polysaccharide fucoidan differs from heparin in human vascular smooth muscle cells. <i>Thrombosis and Haemostasis</i> , <b>2002</b> , 87, 149-54  | 7    | 7 |
| 229 | Acute Effects of Transcatheter Aortic Valve Replacement on Central Aortic Hemodynamics in Patients With Severe Aortic Stenosis. <i>Hypertension</i> , <b>2020</b> , 75, 1557-1564   | 8.5  | 6 |
| 228 | Weight Loss After Bariatric Surgery Significantly Improves Carotid and Cardiac Function in Apparently Healthy People with Morbid Obesity. <i>Obesity Surgery</i> , <b>2020</b> , 30, 3776-3783                                      | 3.7  | 6 |
| 227 | Feasibility of Estimation of Aortic Wave Intensity Using Non-invasive Pressure Recordings in the Absence of Flow Velocity in Man. <i>Frontiers in Physiology</i> , <b>2020</b> , 11, 550  | 4.6  | 6 |
| 226 | Cardiovascular Remodeling Experienced by Real-World, Unsupervised, Young Novice Marathon Runners. <i>Frontiers in Physiology</i> , <b>2020</b> , 11, 232  | 4.6  | 6 |
| 225 | The contribution of obesity to carotid atherosclerotic plaque burden in a general population sample in Norway: The Tromslbtudy. <i>Atherosclerosis</i> , <b>2018</b> , 273, 15-20   | 3.1  | 6 |
| 224 | Nitric Oxide Attenuates Arterial Pulse Wave Reflection in a Vasodilator Responding Pulmonary Arterial Hypertension Patient. <i>Circulation: Cardiovascular Interventions</i> , <b>2018</b> , 11, e006242                            | 6    | 6 |
| 223 | Different associations between beta-blockers and other antihypertensive medication combinations with brachial blood pressure and aortic waveform parameters. <i>International Journal of Cardiology</i> , <b>2016</b> , 219, 257-63 | 3.2  | 6 |
| 222 | A novel fully automated method for mitral regurgitant orifice area quantification. <i>International Journal of Cardiology</i> , <b>2013</b> , 166, 688-95   | 3.2  | 6 |
| 221 | Validation of non-invasive central blood pressure devices: Artery society task force (abridged) consensus statement on protocol standardization. <i>Artery Research</i> , <b>2017</b> , 20, 35                                      | 2.2  | 6 |
| 220 | Association of parental blood pressure with retinal microcirculatory abnormalities indicative of endothelial dysfunction in children. <i>Journal of Hypertension</i> , <b>2014</b> , 32, 598-605                                    | 1.9  | 6 |
| 219 | Naproxen causes cytotoxicity and induces changes in polyamine metabolism independent of cyclo-oxygenase expression. <i>Toxicology Research</i> , <b>2012</b> , 1, 108   | 2.6  | 6 |
| 218 | Action of ryanodine on neurogenic responses in rat isolated mesenteric small arteries. <i>British Journal of Pharmacology</i> , <b>1997</b> , 122, 142-8  | 8.6  | 6 |
| 217 | Induction of oscillatory ventilation pattern using dynamic modulation of heart rate through a pacemaker. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , <b>2008</b> , 295, R219-27     | 3.2  | 6 |
| 216 | The clinical assessment of retinal microvascular structure and therapeutic implications. <i>Current Treatment Options in Cardiovascular Medicine</i> , <b>2007</b> , 9, 236-41  | 2.1  | 6 |

#### (1996-2005)

| 215 | Mechanism of contraction of rat isolated tail arteries by hyposmotic solutions. <i>Journal of Vascular Research</i> , <b>2005</b> , 42, 93-100   | 1.9  | 6 |
|-----|--|------|---|
| 214 | Thiazide-induced hyperglycaemia: a role for calcium-activated potassium channels?. <i>Diabetologia</i> , <b>1996</b> , 39, 861-4   | 10.3 | 6 |
| 213 | The action of dopamine and vascular dopamine (DA1) receptor agonists on human isolated subcutaneous and omental small arteries. <i>British Journal of Pharmacology</i> , <b>1989</b> , 97, 950-6   | 8.6  | 6 |
| 212 | Action of fenoldopam, a selective dopamine (DA1) receptor agonist, on isolated human arteries.<br>Journal of Vascular Research, <b>1989</b> , 26, 119-27   | 1.9  | 6 |
| 211 | Associations of blood pressure variability and retinal arteriolar diameter in participants with type 2 diabetes. <i>Diabetes and Vascular Disease Research</i> , <b>2016</b> , 13, 299-302   | 3.3  | 5 |
| 210 | Sex and regional differences in myocardial plasticity in aortic stenosis are revealed by 3D model machine learning. <i>European Heart Journal Cardiovascular Imaging</i> , <b>2020</b> , 21, 417-427   | 4.1  | 5 |
| 209 | A systematic approach to designing reliable VV optimization methodology: assessment of internal validity of echocardiographic, electrocardiographic and haemodynamic optimization of cardiac resynchronization therapy. <i>International Journal of Cardiology</i> , <b>2013</b> , 167, 954-64 | 3.2  | 5 |
| 208 | Feasibility of cardiovascular magnetic resonance derived coronary wave intensity analysis. <i>Journal of Cardiovascular Magnetic Resonance</i> , <b>2016</b> , 18, 93  | 6.9  | 5 |
| 207 | Impaired post-ischaemic microvascular hyperaemia in Indian Asians is unexplained by diabetes or other cardiovascular risk factors. <i>Atherosclerosis</i> , <b>2012</b> , 221, 503-7   | 3.1  | 5 |
| 206 | Normal asynchrony of left ventricular long and short axes: their relationship with aortic hemodynamics. <i>International Journal of Cardiology</i> , <b>2010</b> , 142, 166-71   | 3.2  | 5 |
| 205 | Assessment of energy requirement for the retinal arterial network in normal and hypertensive subjects. <i>Journal of Biomechanical Engineering</i> , <b>2012</b> , 134, 014501   | 2.1  | 5 |
| 204 | Impaired recovery of intracellular calcium and force after activation in isolated myometrial and subcutaneous resistance arteries from women with preeclampsia. <i>Journal of Hypertension</i> , <b>2010</b> , 28, 568-74  | 1.9  | 5 |
| 203 | Peripheral augmentation index and wave reflection in the radial artery. <i>Hypertension</i> , <b>2008</b> , 51, e45-6; author reply e47  | 8.5  | 5 |
| 202 | Advanced Computational Models for Disturbed and Turbulent Flow in Stenosed Human Carotid Artery Bifurcation. <i>IFMBE Proceedings</i> , <b>2008</b> , 390-394  | 0.2  | 5 |
| 201 | Phospholipase C Isoforms, Cytoskeletal Organization, and Vascular Smooth Muscle Differentiation. <i>Physiology</i> , <b>2000</b> , 15, 41-45   | 9.8  | 5 |
| 200 | Endotoxin-lipoprotein hypothesis. <i>Lancet, The</i> , <b>2000</b> , 356, 2097-8   | 40   | 5 |
| 199 | Platelet-derived growth factor-BB induces apoptosis in cultured vascular smooth muscle cells derived from human saphenous vein. <i>Biochemical Society Transactions</i> , <b>1998</b> , 26, S325   | 5.1  | 5 |
| 198 | Depletion of resistance vessel polyamines attenuates angiotensin II induced blood pressure rise in rats. <i>Clinical and Experimental Hypertension</i> , <b>1996</b> , 18, 811-30  | 2.2  | 5 |

| 197                      | Automatic optic disc detection in colour fundus images by means of multispectral analysis and information content. <i>PeerJ</i> , <b>2019</b> , 7, e7119   | 3.1                      | 5   |
|--------------------------|--|--------------------------|-----|
| 196                      | Inequality in access to health and care services during lockdown Findings from the COVID-19 survey in five UK national longitudinal studies  |                          | 5   |
| 195                      | Influence of Renal Transplantation and Living Kidney Donation on Large Artery Stiffness and Peripheral Vascular Resistance. <i>American Journal of Hypertension</i> , <b>2020</b> , 33, 234-242  | 2.3                      | 5   |
| 194                      | Birth weight and cardiac function assessed by echocardiography in adolescence: Avon Longitudinal Study of Parents and Children. <i>Ultrasound in Obstetrics and Gynecology</i> , <b>2019</b> , 54, 225-231   | 5.8                      | 5   |
| 193                      | Associations between family history and coronary artery calcium and coronary heart disease in British Europeans and South Asians. <i>International Journal of Cardiology</i> , <b>2020</b> , 300, 39-42  | 3.2                      | 5   |
| 192                      | Identification of Distinct Arterial Waveform Clusters and a Longitudinal Evaluation of Their Clinical Usefulness. <i>Hypertension</i> , <b>2019</b> , 74, 921-928  | 8.5                      | 4   |
| 191                      | A Double-Blind Placebo-Controlled Crossover Study of the Effect of Beetroot Juice Containing Dietary Nitrate on Aortic and Brachial Blood Pressure Over 24 h. <i>Frontiers in Physiology</i> , <b>2019</b> , 10, 47  | 4.6                      | 4   |
| 190                      | Recreational marathon running does not cause exercise-induced left ventricular hypertrabeculation. <i>International Journal of Cardiology</i> , <b>2020</b> , 315, 67-71   | 3.2                      | 4   |
| 189                      | The association between anthropometric measures of adiposity and the progression of carotid atherosclerosis. <i>BMC Cardiovascular Disorders</i> , <b>2020</b> , 20, 138   | 2.3                      | 4   |
|                          |  |                          |     |
| 188                      | Non-invasive Technique for Determining Local PWV in the Human Ascending Aorta 2017,  |                          | 4   |
| 188                      | Non-invasive Technique for Determining Local PWV in the Human Ascending Aorta <b>2017</b> ,  Prognostic implications of left ventricular strain by speckle-tracking echocardiography in population-based studies: a systematic review protocol of the published literature. <i>BMJ Open</i> , <b>2018</b> , 8, e023346   | 3                        | 4   |
|                          | Prognostic implications of left ventricular strain by speckle-tracking echocardiography in population-based studies: a systematic review protocol of the published literature. <i>BMJ Open</i> , <b>2018</b>   | 3 4.6                    |     |
| 187                      | Prognostic implications of left ventricular strain by speckle-tracking echocardiography in population-based studies: a systematic review protocol of the published literature. <i>BMJ Open</i> , <b>2018</b> , 8, e023346  Impact of Kidney Function on Cardiovascular Risk and Mortality: A Comparison of South Asian and   |                          |     |
| 187<br>186               | Prognostic implications of left ventricular strain by speckle-tracking echocardiography in population-based studies: a systematic review protocol of the published literature. <i>BMJ Open</i> , <b>2018</b> , 8, e023346  Impact of Kidney Function on Cardiovascular Risk and Mortality: A Comparison of South Asian and European Cohorts. <i>American Journal of Nephrology</i> , <b>2019</b> , 50, 425-433  Reproducibility of Left Ventricular Dyssynchrony Indices by Three-Dimensional Speckle-Tracking Echocardiography: The Impact of Sub-optimal Image Quality. <i>Frontiers in Cardiovascular Medicine</i> ,  | 4.6                      | 4   |
| 187<br>186<br>185        | Prognostic implications of left ventricular strain by speckle-tracking echocardiography in population-based studies: a systematic review protocol of the published literature. <i>BMJ Open</i> , <b>2018</b> , 8, e023346  Impact of Kidney Function on Cardiovascular Risk and Mortality: A Comparison of South Asian and European Cohorts. <i>American Journal of Nephrology</i> , <b>2019</b> , 50, 425-433  Reproducibility of Left Ventricular Dyssynchrony Indices by Three-Dimensional Speckle-Tracking Echocardiography: The Impact of Sub-optimal Image Quality. <i>Frontiers in Cardiovascular Medicine</i> , <b>2019</b> , 6, 149   | 4.6<br>5.4               | 4 4 |
| 187<br>186<br>185        | Prognostic implications of left ventricular strain by speckle-tracking echocardiography in population-based studies: a systematic review protocol of the published literature. <i>BMJ Open</i> , <b>2018</b> , 8, e023346  Impact of Kidney Function on Cardiovascular Risk and Mortality: A Comparison of South Asian and European Cohorts. <i>American Journal of Nephrology</i> , <b>2019</b> , 50, 425-433  Reproducibility of Left Ventricular Dyssynchrony Indices by Three-Dimensional Speckle-Tracking Echocardiography: The Impact of Sub-optimal Image Quality. <i>Frontiers in Cardiovascular Medicine</i> , <b>2019</b> , 6, 149  Extraction of nucleic acids from bone. <i>Methods in Molecular Biology</i> , <b>2012</b> , 816, 249-59  Genetic and early life influences on the human retinal microcirculation. <i>Basic and Clinical</i>   | 4.6<br>5.4<br>1.4        | 4 4 |
| 187<br>186<br>185<br>184 | Prognostic implications of left ventricular strain by speckle-tracking echocardiography in population-based studies: a systematic review protocol of the published literature. <i>BMJ Open</i> , <b>2018</b> , 8, e023346  Impact of Kidney Function on Cardiovascular Risk and Mortality: A Comparison of South Asian and European Cohorts. <i>American Journal of Nephrology</i> , <b>2019</b> , 50, 425-433  Reproducibility of Left Ventricular Dyssynchrony Indices by Three-Dimensional Speckle-Tracking Echocardiography: The Impact of Sub-optimal Image Quality. <i>Frontiers in Cardiovascular Medicine</i> , <b>2019</b> , 6, 149  Extraction of nucleic acids from bone. <i>Methods in Molecular Biology</i> , <b>2012</b> , 816, 249-59  Genetic and early life influences on the human retinal microcirculation. <i>Basic and Clinical Pharmacology and Toxicology</i> , <b>2012</b> , 110, 19-25  Carotid artery hemodynamics: observing patient-specific changes with amlodipine and lisinopril by | 4.6<br>5.4<br>1.4<br>3.1 | 4 4 |

| 179 | Central aortic pressure influences pulse wave velocity. <i>Hypertension</i> , <b>2002</b> , 40, e10-1; author reply e10-1  | 18.5 | 4 |
|-----|--|------|---|
| 178 | PDGF stimulates DNA synthesis in human vascular smooth muscle cells via a novel wortmannin-insensitive phosphatidylinositol 3-kinase. <i>FEBS Letters</i> , <b>2003</b> , 555, 591-6   | 3.8  | 4 |
| 177 | Angiotensin receptor antagonists and vaso-vagal attacks due to sensitisation of the Bezold-Jarisch reflex?. <i>Journal of Human Hypertension</i> , <b>2001</b> , 15, 437-8   | 2.6  | 4 |
| 176 | Ethnic differences in carotid and left ventricular hypertrophy. <i>Journal of Hypertension</i> , <b>2002</b> , 20, 539-43  | 1.9  | 4 |
| 175 | alpha2-Adrenoceptor activation increases calcium channel currents in single vascular smooth muscle cells isolated from human omental resistance arteries. <i>Journal of Vascular Research</i> , <b>1996</b> , 33, 25-31  | 1.9  | 4 |
| 174 | Contrasting mechanisms of intracellular calcium ([Ca2+]i) elevation by angiotensin II (AII) and platelet derived growth factor-BB (PDGF-BB) in human vascular smooth muscle cells (VSMCs). <i>Biochemical Society Transactions</i> , <b>1995</b> , 23, 170S      | 5.1  | 4 |
| 173 | Mechanism of the vasodilator action of pinacidil. <i>Journal of Vascular Research</i> , <b>1990</b> , 27, 314-8  | 1.9  | 4 |
| 172 | Demonstration of Vascular Dopamine Receptors in the Human Forearm Arterial Circulation. <i>Journal of Hypertension</i> , <b>1986</b> , 4, 791  | 1.9  | 4 |
| 171 | Distinct Body Mass Index Trajectories to Young-Adulthood Obesity and Their Different Cardiometabolic Consequences. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>2021</b> , 41, 1580-1593   | 9.4  | 4 |
| 170 | Impact of lockdown on key workers: findings from the COVID-19 survey in four UK national longitudinal studies. <i>Journal of Epidemiology and Community Health</i> , <b>2021</b> , 75, 955-962   | 5.1  | 4 |
| 169 | Statin utilisation in a real-world setting: a retrospective analysis in relation to arterial and cardiovascular autonomic function. <i>Pharmacology Research and Perspectives</i> , <b>2016</b> , 4, e00276  | 3.1  | 4 |
| 168 | Regression of left ventricular hypertrophy provides an additive physiological benefit following treatment of aortic stenosis: Insights from serial coronary wave intensity analysis. <i>Acta Physiologica</i> , <b>2018</b> , 224, e13109                        | 5.6  | 4 |
| 167 | Arterial waveform parameters in a large, population-based sample of adults: relationships with ethnicity and lifestyle factors. <i>Journal of Human Hypertension</i> , <b>2017</b> , 31, 305-312   | 2.6  | 3 |
| 166 | Computational simulations of thrombolysis in acute stroke: Effect of clot size and location on recanalisation. <i>Medical Engineering and Physics</i> , <b>2019</b> , 73, 9-17   | 2.4  | 3 |
| 165 | Associations of Central and Peripheral Blood Pressure With Cardiac Structure and Function in an Adolescent Birth Cohort: The Avon Longitudinal Study of Parents and Children. <i>Journal of the American College of Cardiology</i> , <b>2015</b> , 65, 2048-2050 | 15.1 | 3 |
| 164 | The influence of fitness on exercise blood pressure and its association with cardiac structure in adolescence. <i>Scandinavian Journal of Medicine and Science in Sports</i> , <b>2020</b> , 30, 1033-1039   | 4.6  | 3 |
| 163 | Cardiometabolic Health Among Adult Offspring of Hypertensive Pregnancies: The Cardiovascular Risk in Young Finns Study. <i>Journal of the American Heart Association</i> , <b>2018</b> , 7,  | 6    | 3 |
| 162 | British randomised controlled trial of AV and VV optimization ("BRAVO") study: rationale, design, and endpoints. <i>BMC Cardiovascular Disorders</i> , <b>2014</b> , 14, 42  | 2.3  | 3 |

| 161 | Method for percutaneously introducing, and removing, anatomical stenosis of predetermined severity in vivo: the "stenotic stent". <i>Journal of Cardiovascular Translational Research</i> , <b>2013</b> , 6, 640-8                                   | 3.3  | 3 |
|-----|--|------|---|
| 160 | Novel cardiac pacemaker-based human model of periodic breathing to develop real-time, pre-emptive technology for carbon dioxide stabilisation. <i>Open Heart</i> , <b>2014</b> , 1, e000055  | 3    | 3 |
| 159 | Inhibition of proliferation by heparin and expression of p53 in cultured human vascular smooth muscle cells. <i>Journal of Human Hypertension</i> , <b>1997</b> , 11, 611-4  | 2.6  | 3 |
| 158 | Effect of hypercholesterolaemia on voltage-operated calcium channel currents in rabbit arterial smooth muscle cells. <i>Journal of Human Hypertension</i> , <b>1999</b> , 13, 849-53   | 2.6  | 3 |
| 157 | Different effects of platelet derived growth factor isoforms on DNA synthesis and migration in human vascular smooth muscle cells. <i>Biochemical Society Transactions</i> , <b>1995</b> , 23, 608S  | 5.1  | 3 |
| 156 | Analysis of gene expression in bone by quantitative RT/PCR. <i>Methods in Molecular Biology</i> , <b>2012</b> , 816, 261-75  | 1.4  | 3 |
| 155 | Assessing the causal role of body mass index on cardiovascular health in young adults: Mendelian randomization and recall-by-genotype analyses   |      | 3 |
| 154 | Metabolic profiles of socio-economic position: a multi-cohort analysis. <i>International Journal of Epidemiology</i> , <b>2021</b> , 50, 768-782   | 7.8  | 3 |
| 153 | Metformin and carotid intima-media thickness in never-smokers with type 1 diabetes: The REMOVAL trial. <i>Diabetes, Obesity and Metabolism</i> , <b>2021</b> , 23, 1371-1378   | 6.7  | 3 |
| 152 | Submaximal exercise blood pressure and cardiovascular structure in adolescence. <i>International Journal of Cardiology</i> , <b>2019</b> , 275, 152-157  | 3.2  | 3 |
| 151 | Studying accelerated cardiovascular ageing in Russian adults through a novel deep-learning ECG biomarker. <i>Wellcome Open Research</i> ,6, 12   | 4.8  | 3 |
| 150 | Socioeconomic inequalities in prevalence and development of multimorbidity across adulthood: A longitudinal analysis of the MRC 1946 National Survey of Health and Development in the UK. <i>PLoS Medicine</i> , <b>2021</b> , 18, e1003775          | 11.6 | 3 |
| 149 | Adaptations to Coronary Physiology in a Patient With Severe Aortic Stenosis and Complete Heart Block Undergoing Transcatheter Aortic Valve Replacement. <i>JACC: Cardiovascular Interventions</i> , <b>2019</b> , 12, 687-689                        | 5    | 2 |
| 148 | Errors of Fact in the Recent Article by Westerhof, Segers, and Westerhof. <i>Hypertension</i> , <b>2015</b> ,  | 8.5  | 2 |
| 147 | Effect of adiposity on differences in carotid plaque burden in studies conducted in Norway and Russia: a cross-sectional analysis of two populations at very different risk of cardiovascular mortality. <i>BMJ Open</i> , <b>2020</b> , 10, e036583 | 3    | 2 |
| 146 | Age matters: differences in exercise-induced cardiovascular remodelling in young and middle aged healthy sedentary individuals. <i>European Journal of Preventive Cardiology</i> , <b>2021</b> , 28, 738-746   | 3.9  | 2 |
| 145 | Genetic variants in PPARGC1B and CNTN4 are associated with thromboxane A formation and with cardiovascular event free survival in the Anglo-Scandinavian Cardiac Outcomes Trial (ASCOT). <i>Atherosclerosis</i> , <b>2018</b> , 269, 42-49           | 3.1  | 2 |
| 144 | QRISK2 validation by ethnic group. <i>Heart</i> , <b>2014</b> , 100, 437   | 5.1  | 2 |

| 143 | 5.5 IMPACT OF PULMONARY ENDARTERECTOMY ON PULMONARY ARTERIAL WAVE PROPAGATION AND RESERVOIR FUNCTION. <i>Artery Research</i> , <b>2017</b> , 20, 60  | 2.2             | 2 |
|-----|--|-----------------|---|
| 142 | Statin use is associated with reduced depressive symptoms in Europeans, but increased symptoms in ethnic minorities in the UK: an observational study. <i>British Journal of Clinical Pharmacology</i> , <b>2015</b> , 80, 172-3                         | 3.8             | 2 |
| 141 | Comment on Shah et al. Cardiovascular complications and mortality after diabetes diagnosis for South Asian and Chinese patients: a population-based cohort study. Diabetes care 2013;36:2670-2676. <i>Diabetes Care</i> , <b>2014</b> , 37, e78-9        | 14.6            | 2 |
| 140 | 003 Validating markers of mechanical dyssynchrony by experimental manipulation of interventricular timings: what is needed to make them a reasonable prospect for cardiac resynchronisation therapy selection?. <i>Heart</i> , <b>2012</b> , 98, A5.1-A5 | 5.1             | 2 |
| 139 | A novel in vitro model of conditionally immortalized human vascular smooth muscle cells. A tool for aging studies. <i>Annals of the New York Academy of Sciences</i> , <b>2000</b> , 908, 321-3  | 6.5             | 2 |
| 138 | The Devil Is in The Detail: A Constructionist Account of Repetition Blindness 2005, 101-130  |                 | 2 |
| 137 | Action of the endothelin receptor (ETA) antagonist BQ-123 on forearm blood flow in young normotensive subjects. <i>Clinical Science</i> , <b>2002</b> , 102, 661   | 6.5             | 2 |
| 136 | Low dose indapamide plus perindopril combination effects on cardiovascular structure and function in genetic hypertension. <i>Clinical and Experimental Pharmacology and Physiology</i> , <b>1999</b> , 26, 622-   | ·7 <sup>3</sup> | 2 |
| 135 | Intracellular pH and calcium in vascular smooth muscle. <i>Biochemical Society Transactions</i> , <b>1989</b> , 17, 506-   | 59.7            | 2 |
| 134 | Autoradiographic localization of dopamine D1 receptors in human renal cortex. <i>Biochemical Society Transactions</i> , <b>1989</b> , 17, 918-919  | 5.1             | 2 |
| 133 | Validation of lipid-related therapeutic targets for coronary heart disease prevention using human genetics. <i>Nature Communications</i> , <b>2021</b> , 12, 6120  | 17.4            | 2 |
| 132 | Protective Effect of Polyamines on NSAID-Induced Injury and Apoptosis <b>2006</b> , 267-278  |                 | 2 |
| 131 | Geometrical and Morphological Analysis of Vascular Branches from Fundus Retinal Images. <i>Lecture Notes in Computer Science</i> , <b>2000</b> , 756-765   | 0.9             | 2 |
| 130 | Image-based Blood Flow Simulation in the Retinal Circulation. IFMBE Proceedings, 2009, 1963-1966   | 0.2             | 2 |
| 129 | Image Quality Causes Substantial Bias in Three-Dimensional Speckle-Tracking Echocardiography Measu   | res             | 2 |
| 128 | Type 2 diabetes does not account for ethnic differences in exercise capacity or skeletal muscle function in older adults. <i>Diabetologia</i> , <b>2020</b> , 63, 624-635  | 10.3            | 2 |
| 127 | Physiological and clinical insights from reservoir-excess pressure analysis. <i>Journal of Human Hypertension</i> , <b>2021</b> , 35, 758-768  | 2.6             | 2 |
| 126 | Longitudinal birth cohort study finds that life-course frailty associates with later-life heart size and function. <i>Scientific Reports</i> , <b>2021</b> , 11, 6272  | 4.9             | 2 |

| 125 | Reservoir-Excess Pressure Parameters Independently Predict Cardiovascular Events in Individuals With Type 2 Diabetes. <i>Hypertension</i> , <b>2021</b> , 78, 40-50  | 8.5 | 2 |
|-----|--|-----|---|
| 124 | Circulating microRNA-122 is associated with incident metabolic syndrome and type-2 diabetes. <i>Atherosclerosis</i> , <b>2016</b> , 252, e263  | 3.1 | 2 |
| 123 | Joint Modeling of Individual Trajectories, Within-Individual Variability, and a Later Outcome: Systolic Blood Pressure Through Childhood and Left Ventricular Mass in Early Adulthood. <i>American Journal of Epidemiology</i> , <b>2021</b> , 190, 652-662          | 3.8 | 2 |
| 122 | P53 ZERO FLOW PRESSURE (PINFINITY) IS LARGER THAN MEAN CIRCULATORY FILLING PRESSURE. A SYSTEMATIC REVIEW AND META-ANALYSIS. <i>Artery Research</i> , <b>2018</b> , 24, 94  | 2.2 | 2 |
| 121 | Distinct impacts of heart rate and right atrial-pacing on left atrial mechanical activation and optimal AV delay in CRT. <i>PACE - Pacing and Clinical Electrophysiology</i> , <b>2018</b> , 41, 959   | 1.6 | 2 |
| 120 | 3D Reconstruction of the Retinal Arterial Tree Using Subject-Specific Fundus Images <b>2009</b> , 187-201  |     | 2 |
| 119 | Imaging Protocol, Feasibility, and Reproducibility of Cardiovascular Phenotyping in a Large Tri-Ethnic Population-Based Study of Older People: The Southall and Brent Revisited (SABRE) Study. <i>Frontiers in Cardiovascular Medicine</i> , <b>2020</b> , 7, 591946 | 5.4 | 1 |
| 118 | Relations of Demographic and Clinical Factors With Cardiovascular Autonomic Function in a Population-Based Study: An Assessment By Quantile Regression. <i>American Journal of Hypertension</i> , <b>2017</b> , 31, 53-62  | 2.3 | 1 |
| 117 | Calcium Channel Blockers <b>2018</b> , 242-253   |     | 1 |
| 116 | 3.4 RESERVOIR PRESSURE SEPARATION AT BRACHIAL, CAROTID AND RADIAL ARTERIES: A QUANTITATIVE COMPARISON AND EVALUATION. <i>Artery Research</i> , <b>2017</b> , 20, 54  | 2.2 | 1 |
| 115 | Automated speckle tracking algorithm to aid on-axis imaging in echocardiography. <i>Journal of Medical Imaging</i> , <b>2014</b> , 1, 037001   | 2.6 | 1 |
| 114 | 116 CRT optimisation: improving echocardiographic techniques by accommodating biological variability within different echocardiographic parameters. <i>Heart</i> , <b>2011</b> , 97, A66-A67   | 5.1 | 1 |
| 113 | 39 Blood-derived endothelial progenitor cells from Von Willebrand's disease patients demonstrate that Von Willebrand factor regulates angiogenesis. <i>Heart</i> , <b>2011</b> , 97, e7-e7   | 5.1 | 1 |
| 112 | Wearing your heart in your sleeve?. European Heart Journal, 2001, 22, 1071-3   | 9.5 | 1 |
| 111 | Regulation of phospholipase C delta 1 activity by GTP-binding proteins: rhoA as an inhibitory modulator. <i>Biochemical Society Transactions</i> , <b>1998</b> , 26, S128  | 5.1 | 1 |
| 110 | A comparison of calcium channel currents in vascular smooth muscle cells from Watanabe hereditary hypercholesterolaemic and New Zealand white rabbits. <i>Biochemical Society Transactions</i> , <b>1994</b> , 22, 361S  | 5.1 | 1 |
| 109 | Low density lipoprotein and calcium homeostasis in human vascular smooth muscle cells. <i>Biochemical Society Transactions</i> , <b>1994</b> , 22, 145S  | 5.1 | 1 |
| 108 | Angiotensin II receptors are exclusively of the AT1 subtype in cultured human vascular smooth muscle cells. <i>Biochemical Society Transactions</i> , <b>1995</b> , 23, 458S   | 5.1 | 1 |

| 107 | Celiprolol. <i>Lancet, The</i> , <b>1992</b> , 339, 247   | 40   | 1 |
|-----|---|------|---|
| 106 | Ergometrine and bronchospasm. <i>Anaesthesia</i> , <b>1987</b> , 42, 1115-6   | 6.6  | 1 |
| 105 | Glycoprotein Acetyls: A Novel Inflammatory Biomarker of Early Cardiovascular Risk in the Young<br>Journal of the American Heart Association, <b>2022</b> , 11, e024380  | 6    | 1 |
| 104 | Study Protocol - Insight 46 Cardiovascular: A Sub-study of the MRC National Survey of Health and Development. <i>Artery Research</i> , <b>2020</b> , 26, 170-179  | 2.2  | 1 |
| 103 | The UK COVID-19 furlough scheme and associations with smoking, alcohol consumption and vaping: evidence from 8 UK longitudinal population surveys   |      | 1 |
| 102 | Validation of lipid-related therapeutic targets for coronary heart disease prevention using human gene  | tics | 1 |
| 101 | Type 2 diabetes risks and determinants in second-generation migrants and mixed ethnicity people of South Asian and African Caribbean descent in the UK. <i>Diabetologia</i> , <b>2022</b> , 65, 113-127   | 10.3 | 1 |
| 100 | WAVE INTENSITY ANALYSIS. Journal of Hypertension, <b>2000</b> , 18, S61   | 1.9  | 1 |
| 99  | The modified arterial reservoir: an update with consideration of asymptotic pressure (P)I and zero-flow pressure (Pzf)  |      | 1 |
| 98  | Cholesteryl Ester Transfer Protein as a Drug Target for Cardiovascular Disease  |      | 1 |
| 97  | Lipoprotein Signatures of Cholesteryl Ester Transfer Protein and HMG-CoA Reductase Inhibition   |      | 1 |
| 96  | Improvements in Skeletal Muscle Can Be Detected Using Broadband NIRS in First-Time Marathon Runners. <i>Advances in Experimental Medicine and Biology</i> , <b>2020</b> , 1232, 245-251   | 3.6  | 1 |
| 95  | Role of the Metabolic Profile in Mediating the Relationship Between Body Mass Index and Left Ventricular Mass in Adolescents: Analysis of a Prospective Cohort Study. <i>Journal of the American Heart Association</i> , <b>2020</b> , 9, e016564 | 6    | 1 |
| 94  | Mechanisms of Aortic Flow Deceleration and the Effect of Wave Reflection on Left Ventricular Function. <i>Frontiers in Physiology</i> , <b>2020</b> , 11, 578701  | 4.6  | 1 |
| 93  | Cuff Under Pressure for Greater Accuracy. Current Hypertension Reports, 2020, 22, 93  | 4.7  | 1 |
| 92  | Puberty timing and markers of cardiovascular structure and function at 25 years: a prospective cohort study. <i>BMC Medicine</i> , <b>2021</b> , 19, 78   | 11.4 | 1 |
| 91  | Study Protocol: The Heart and Brain Study. Frontiers in Physiology, 2021, 12, 643725  | 4.6  | 1 |
| 90  | Prognostic Value of Pulmonary Transit Time and Pulmonary Blood Volume Estimation Using Myocardial Perfusion CMR. <i>JACC: Cardiovascular Imaging</i> , <b>2021</b> , 14, 2107-2119  | 8.4  | 1 |

| 89 | Effect of a Multicomponent Intervention on Antihypertensive Medication Intensification in Rural South Asia: Post Hoc Analysis of a Cluster RCT. <i>American Journal of Hypertension</i> , <b>2021</b> , 34, 981-988                          | 2.3    | 1 |
|----|--|--------|---|
| 88 | Patients with aortic stenosis exhibit early improved endothelial function following transcatheter aortic valve replacement: The eFAST study. <i>International Journal of Cardiology</i> , <b>2021</b> , 332, 143-147                         | 3.2    | 1 |
| 87 | INCREASED PULSE PRESSURE ASSOCIATED WITH A DECLINE IN BRAIN STRUCTURE AND FUNCTION. <i>Journal of Hypertension</i> , <b>2019</b> , 37, e218-e219   | 1.9    | 1 |
| 86 | Identifying Isolated Systolic Hypertension From Upper-Arm Cuff Blood Pressure Compared With Invasive Measurements. <i>Hypertension</i> , <b>2021</b> , 77, 632-639   | 8.5    | 1 |
| 85 | Sex differences in the contribution of different physiological systems to physical function in older adults. <i>GeroScience</i> , <b>2021</b> , 43, 443-455  | 8.9    | 1 |
| 84 | Associations between High Blood Pressure and DNA Methylation. <i>Journal of Clinical Epigenetics</i> , <b>2018</b> , 04,   |        | 1 |
| 83 | Semiautomatic Vendor Independent Software for Assessment of Local Arterial Stiffness 2018,   |        | 1 |
| 82 | The UK Coronavirus Job Retention Scheme and diet, physical activity, and sleep during the COVID-19 pandemic: evidence from eight longitudinal population surveys <i>BMC Medicine</i> , <b>2022</b> , 20, 147                                 | . 11.4 | 1 |
| 81 | Multiphysics Modelling and Simulation of Thrombolysis via Activated Platelet-Targeted Nanomedicine <i>Pharmaceutical Research</i> , <b>2022</b> , 39, 41   | 4.5    | O |
| 80 | Excess pressure as an analogue of blood flow velocity. <i>Journal of Hypertension</i> , <b>2021</b> , 39, 421-427  | 1.9    | O |
| 79 | Modelling ethnic differences in the distribution of insulin resistance via Bayesian nonparametric processes: an application to the SABRE cohort study. <i>International Journal of Biostatistics</i> , <b>2020</b> , 17, 153                 | -184   | O |
| 78 | Cardiorespiratory fitness, fatness, and the acute blood pressure response to exercise in adolescence. <i>Scandinavian Journal of Medicine and Science in Sports</i> , <b>2021</b> , 31, 1693-1698  | 4.6    | O |
| 77 | Blood pressure variability and night-time dipping assessed by 24-hour ambulatory monitoring: Cross-sectional association with cardiac structure in adolescents. <i>PLoS ONE</i> , <b>2021</b> , 16, e0253196                                 | 3.7    | 0 |
| 76 | Establishing reference intervals for triglyceride-containing lipoprotein subfraction metabolites measured using nuclear magnetic resonance spectroscopy in a UK population. <i>Annals of Clinical Biochemistry</i> , <b>2021</b> , 58, 47-53 | 2.2    | O |
| 75 | Impact of afterload and infiltration on coexisting aortic stenosis and transthyretin amyloidosis.<br>Heart, <b>2022</b> , 108, 67-72   | 5.1    | O |
| 74 | Sex-related differences in whole brain volumes at age 70 in association with hyperglycemia during adult life <i>Neurobiology of Aging</i> , <b>2021</b> , 112, 161-169   | 5.6    | O |
| 73 | Study protocol: MyoFit46-the cardiac sub-study of the MRC National Survey of Health and Development <i>BMC Cardiovascular Disorders</i> , <b>2022</b> , 22, 140  | 2.3    | O |
| 72 | Is carotid artery atherosclerosis associated with poor cognitive function assessed using the Mini-Mental State Examination? A systematic review and meta-analysis <i>BMJ Open</i> , <b>2022</b> , 12, e055131                                | 3      | O |

| 71 | Prolongation-Results From the 1946 British Birth Cohort <i>Frontiers in Cardiovascular Medicine</i> , <b>2022</b> , 9, 863988  | 5.4                   | О |
|----|--|-----------------------|---|
| 70 | Relationship Between Image Quality and Bias in 3D Echocardiographic Measures: Data From the SABRE (Southall and Brent Revisited) Study <i>Journal of the American Heart Association</i> , <b>2022</b> , e019183  | 6                     | O |
| 69 | Association between carotid atherosclerosis and brain activation patterns during the Stroop task in older adults: An fNIRS investigation. <i>NeuroImage</i> , <b>2022</b> , 257, 119302  | 7.9                   | O |
| 68 | Response to 'Does smoking or alcohol cause early vascular damage in teenage years?'. <i>European Heart Journal</i> , <b>2019</b> , 40, 3497  | 9.5                   |   |
| 67 | Improving haemodynamic optimization of cardiac resynchronization therapy for heart failure. <i>Physiological Measurement</i> , <b>2019</b> , 40, 04NT01  | 2.9                   |   |
| 66 | Vascular risk factors and amyloid pathology: Additive or interactive associations?. <i>Alzheimerks and Dementia</i> , <b>2020</b> , 16, e037922  | 1.2                   |   |
| 65 | Lifetime cigarette smoking and later-life brain health: The population-based 1946 British Birth Cohort. <i>Alzheimerks and Dementia</i> , <b>2020</b> , 16, e041111  | 1.2                   |   |
| 64 | Mid-life blood pressure and microstructural white matter: Findings from the 1946 British birth cohort. <i>Alzheimerk</i> and <i>Dementia</i> , <b>2020</b> , 16, e045707   | 1.2                   |   |
| 63 | Reply: Rejuvenating Pheidippides and the Evergreen Benefits of Endurance Training. <i>Journal of the American College of Cardiology</i> , <b>2020</b> , 75, 2278-2279  | 15.1                  |   |
| 62 | Angiographic Functional Scoring of Coronary Artery Disease Predicts Mortality in Patients With Severe Aortic Stenosis Undergoing TAVR. <i>Cardiovascular Revascularization Medicine</i> , <b>2020</b> , 21, 1336-134   | 12 <sup>1.6</sup>     |   |
| 61 | Reply - Aortic Reservoir Pressure - not overstretching but testing. <i>Journal of Hypertension</i> , <b>2018</b> , 36, 96  | 4 <b>-<u>9</u>6</b> 5 |   |
| 60 | Exaggerated Exercise Blood Pressure is Associated with Higher Left Ventricular Mass in Adolescence. The Avon Longitudinal Study of Parents and Children. <i>Journal of Hypertension</i> , <b>2016</b> , 34, e55  | 1.9                   |   |
| 59 | OS 07-03 PRINCIPAL FINDINGS OF THE INVASIVE BLOOD PRESSURE META-ANALYSIS CONSORTIUM (INSPECT) ON THE ACCURACY OF BRACHIAL CUFF BLOOD PRESSURE DEVICES. <i>Journal of Hypertension</i> , <b>2016</b> , 34, e65-e66  | 1.9                   |   |
| 58 | 133DEPRESSIVE SYMPTOMS ARE ASSOCIATED WITH PERCEIVED, NOT OBJECTIVE, EXERTION DURING EXERCISE IN EUROPEAN, INDIAN ASIAN AND AFRICAN-CARIBBEAN GROUPS. <i>Age and Ageing</i> , <b>2019</b> , 48, i38-i38  | 3                     |   |
| 57 | OP68 How is overweight/obesity across the life course associated with levels of adipokines, inflammatory and endothelial markers at age 60B4 years? Findings from the 1946 birth cohort. <i>Journal of Epidemiology and Community Health</i> , <b>2014</b> , 68, A34.3-A35 | 5.1                   |   |
| 56 | 39 Evidence that Haemodynamic Response to VV Delay Optimisation of Crt Devices May be Simply a Function of the Method of Programming AV Delay. <i>Heart</i> , <b>2014</b> , 100, A21.2-A22   | 5.1                   |   |
| 55 | [PP.19.32] RESERVOIR-PRESSURE ANALYSIS PREDICTS CARDIOVASCULAR EVENTS IN INDIVIDUALS WITH TYPE 2 DIABETES. <i>Journal of Hypertension</i> , <b>2017</b> , 35, e248-e249  | 1.9                   |   |
| 54 | P142 AORTIC ROOT STIFFNESS AND MECHANICAL PROPERTIES OF HEALTHY ADULTS. <i>Artery Research</i> , <b>2017</b> , 20, 96  | 2.2                   |   |

| 53 | P187 IN SEVERE AORTIC STENOSIS, DECREASED SYSTEMIC VASCULAR RESISTANCE IS ASSOCIATED WITH A LARGER, THICKER WALLED VENTRICLE EXCEPT FOR THE SEPTUM. <i>Artery Research</i> , <b>2017</b> , 20, 107   | 2.2   |
|----|--|-------|
| 52 | P122 CALCULATING RESERVOIR PRESSURE WITH OR WITHOUT FLOW INFORMATION: SIMILARITY AND ALGORITHMIC SENSITIVITY AT RADIAL ARTERY. <i>Artery Research</i> , <b>2017</b> , 20, 78   | 2.2   |
| 51 | P165 HIGHER BLOOD PRESSURE IN YOUTH IS ATTRIBUTABLE TO A COMBINATION OF HIGHER CARDIAC OUTPUT AND HIGHER TOTAL PERIPHERAL RESISTANCE. <i>Artery Research</i> , <b>2017</b> , 20, 82  | 2.2   |
| 50 | 44 Signal-to-Noise Ratio During Haemodynamic Optimisation of AV Delay is Improved more by Atrial Pacing than by Increasing Heart Rate. <i>Heart</i> , <b>2015</b> , 101, A25.2-A26   | 5.1   |
| 49 | Response to editorial 'reproducibility of cardiopulmonary exercise test variables: getting into an additional strength of the test'. <i>European Journal of Preventive Cardiology</i> , <b>2014</b> , 21, 454-5  | 3.9   |
| 48 | 051 FRACTIONAL FLOW RESERVE AND THE INSTANT WAVE-FREE RATIO HAVE EQUIVALENT AGREEMENT WITH FLOW BASED INDICES ACROSS THE ENTIRE SPECTRUM OF STENOSIS SEVERITY RESULTS OF THE CLARIFY STUDY RESULTS OF CLARIFY. <i>Heart</i> , <b>2013</b> , 99, A35.1-A35                  | 5.1   |
| 47 | Response to "A new exercise central hemodynamics paradigm: time for reflection or expansion"?. <i>Hypertension</i> , <b>2013</b> , 62, e36   | 8.5   |
| 46 | 107 THE EFFECT OF OBESITY ON AORTIC STIFFNESS IS AGE DEPENDANT. Heart, <b>2013</b> , 99, A67.1-A67   | 5.1   |
| 45 | 052 THE TRANS-STENOTIC PRESSURE GRADIENT DURING THE DIASTOLIC WAVE-FREE PERIOD IS PROPORTIONAL TO FLOW: THE PHYSIOLOGICAL BASIS OF THE INSTANT-WAVE-FREE RATIO. <i>Heart</i> , <b>2013</b> , 99, A35.2-A35   | 5.1   |
| 44 | 054 INSTANTANEOUS WAVE-FREE RATIO (IFR) CAN DETECT IMPROVEMENT IN CORONARY STENOSIS SEVERITY AFTER PERCUTANEOUS INTERVENTION. <i>Heart</i> , <b>2013</b> , 99, A37.1-A37   | 5.1   |
| 43 | 099 Acute changes in coronary haemodynamic in patients undergoing transcatheter aortic valve implantation. <i>Heart</i> , <b>2010</b> , 96, A59.1-A59  | 5.1   |
| 42 | 127 Why does primary angioplasty not work in observational studies when it works consistently in randomised controlled trials? an analysis of 51242 patients with ST elevation myocardial infarction. <i>Heart</i> , <b>2010</b> , 96, A73.2-A74                           | 5.1   |
| 41 | 85 Prediction of response to biventricular pacing from dyssynchrony indices: the absolute limit on predictability, and its clinical implications. <i>Heart</i> , <b>2011</b> , 97, A49-A50   | 5.1   |
| 40 | 9 IgG anti-malonedialdehyde-LDL antibodies are associated with low risk of cardiovascular events in a substudy of the anglo-scandinavian cardiac outcomes trial (Ascot), and are unrelated To LDL, CRP levels and statin treatment. <i>Heart</i> , <b>2011</b> , 97, e7-e7 | 5.1   |
| 39 | 019 Development and validation of a novel pressure-only intra-coronary index of coronary stenosis severity. <i>Heart</i> , <b>2012</b> , 98, A13.1-A13   | 5.1   |
| 38 | 136 Increase in left ventricular mass in type 2 diabetes is dependent on duration of diabetes. <i>Heart</i> , <b>2012</b> , 98, A77.1-A77  | 5.1   |
| 37 | 098 Differential effects of hypertrophy secondary to hypertension and aortic stenosis on coronary haemodynamics. <i>Heart</i> , <b>2010</b> , 96, A58.2-A59  | 5.1   |
| 36 | Low Birth Weight and Retinal Vascular Caliber in Young Children: In Reply. <i>Pediatrics</i> , <b>2008</b> , 121, 863-86   | 537.4 |

| 35 | The Relationship between Velocity and Cerebral Resistance during Vasomotor Reactivity Testing: Should We Report a Different Measurement?. <i>Journal for Vascular Ultrasound</i> , <b>2008</b> , 32, 67-74   | 0.1           |
|----|--|---------------|
| 34 | Does the Difference in Realistic Waveform Before and After Stenting Affect Hemodynamics in Stenosed Coronary Artery? <b>2007</b> , 467   |               |
| 33 | Hemodynamic determinants of carotid artery structure in essential hypertension. <i>American Journal of Hypertension</i> , <b>2004</b> , 17, S131-S132  | 2.3           |
| 32 | Vascular tone <b>2002</b> , 3-32   |               |
| 31 | Introduction. Journal of Human Hypertension, <b>2000</b> , 14, 359   | 2.6           |
| 30 | Role of isoprenylation in the inhibitory action of lovastatin on proliferation of SV40 immortalized human saphenous vein smooth muscle cells. <i>Biochemical Society Transactions</i> , <b>1998</b> , 26, S324   | 5.1           |
| 29 | Left Ventricular Structure and Function in Previously Untreated Hypertensive Patients: The Importance of Blood Pressure, the Nocturnal Blood Pressure Dip and Heart Rate. <i>European Journal of Cardiovascular Prevention and Rehabilitation</i> , <b>1995</b> , 2, 255-261                                   |               |
| 28 | AIF4- inhibits influx of Ca2+ into vascular smooth muscle cells. <i>Biochemical Society Transactions</i> , <b>1995</b> , 23, 171S  | 5.1           |
| 27 | Antihypertensive Medication Use and Its Effects on Blood Pressure and Haemodynamics in a Tri-ethnic Population Cohort: Southall and Brent Revisited (SABRE) <i>Frontiers in Cardiovascular Medicine</i> , <b>2021</b> , 8, 795267  | 5.4           |
| 26 | VASCULAR GEOMETRY RECONSTRUCTION WITH 3D ULTRASOUND, APPLIED TO ANTHROPOMORPHIC PHANTOMS MODELS. <i>Journal of Hypertension</i> , <b>2004</b> , 22, S13  | 1.9           |
| 25 | APPLICATION OF ULTRASOUND-BASED COMPUTATIONAL FLUID DYNAMICS TO MODELING BLOOD FLOW IN THE CAROTID BIFURCATION <b>2005</b> , 109-156   |               |
| 24 | 456-P: The REMOVAL Trial: Effect of Metformin on Markers of Cardiometabolic Risk in Patients with Type 1 Diabetes. <i>Diabetes</i> , <b>2019</b> , 68, 456-P   | 0.9           |
| 23 | 490-P: Renal Effects of Metformin in Type 1 Diabetes (T1D): The REMOVAL Trial. <i>Diabetes</i> , <b>2020</b> , 69, 490   | <b>)</b> 49.9 |
| 22 | Report from the Annual Conference of the British Society of Echocardiography, October 2018, ACC Liverpool, Liverpool. <i>Echo Research and Practice</i> , <b>2020</b> , 7, M1  | 2             |
| 21 | Thiazide Diuretics <b>2009</b> , 555-561   |               |
| 20 | 004 Simultaneous invasive pressure and flow measurements during atrioventricular delay improvement reveal a compensatory peripheral vasodilator response which attenuates the initial blood pressure increment: implications for the design of optimisation protocols. <i>Heart</i> , <b>2012</b> , 98, A5.2-A | 5.1<br>6      |
| 19 | 137 Time for a review of the Watch and wait[strategy for young borderline-hypertensives?. <i>Heart</i> , <b>2012</b> , 98, A77.2-A77   | 5.1           |
| 18 | Subclinical macro and microvascular disease is differently associated with depressive symptoms in men and women: Findings from the SABRE population-based study. <i>Atherosclerosis</i> , <b>2020</b> , 312, 35-42   | 3.1           |
|    |  |               |

| 17 | ELEVATED EXCESS PRESSURE INTEGRAL IS ASSOCIATED WITH VASCULAR BIOMARKERS OF SUBCLINICAL ATHEROSCLEROSIS IN OLDER ADULTS. <i>Journal of Hypertension</i> , <b>2021</b> , 39, e314  | 1.9  |
|----|---|------|
| 16 | SUBSTANTIAL CHANGES IN CARDIOVASCULAR HEALTH OCCUR FROM ADOLESCENCE TO EMERGING ADULTHOOD. <i>Journal of Hypertension</i> , <b>2021</b> , 39, e4  | 1.9  |
| 15 | ALTERED CENTRAL HAEMODYNAMIC PARAMETERS DERIVED FROM RESERVOIR PRESSURE ANALYSIS. <i>Journal of Hypertension</i> , <b>2019</b> , 37, e307   | 1.9  |
| 14 | P125 ESTIMATION OF MEAN ARTERIAL PRESSURE IN NON-INVASIVE STUDIES. <i>Artery Research</i> , <b>2018</b> , 24, 115   | 2.2  |
| 13 | A17826 Cuff blood pressure is progressively more biased with increasing age. <i>Journal of Hypertension</i> , <b>2018</b> , 36, e246  | 1.9  |
| 12 | PARAMETERS DERIVED FROM RESERVOIR PRESSURE ANALYSIS INDEPENDENTLY PREDICT CARDIOVASCULAR EVENTS IN A MULTI-CENTRE STUDY OF INDIVIDUALS WITH TYPE 2 DIABETES.<br>Journal of Hypertension, <b>2018</b> , 36, e286-e287                                | 1.9  |
| 11 | Hypertensive Disorders During Pregnancy and Offspring Retinal Microvasculature During Adolescence. <i>Journal of the American College of Cardiology</i> , <b>2018</b> , 72, 1318-1320   | 15.1 |
| 10 | The Relationship Between Oxygen Uptake and the Rate of Myocardial Deformation During Exercise. <i>Bioengineered</i> , <b>2021</b> , 10, 85-93   | 5.7  |
| 9  | Childhood Bradycardia Associates With Atrioventricular Conduction Defects in Older Age: A Longitudinal Birth Cohort Study. <i>Journal of the American Heart Association</i> , <b>2021</b> , 10, e021877   | 6    |
| 8  | Limited value of pulse wave analysis in assessing arterial wave reflection and stiffness in the pulmonary artery. <i>Physiological Reports</i> , <b>2021</b> , 9, e15024  | 2.6  |
| 7  | Carotid Reservoir Pressure Decrease After Prolonged Head Down Tilt Bed Rest in Young Healthy Subjects Is Associated With Reduction in Left Ventricular Ejection Time and Diastolic Length <i>Frontiers in Physiology</i> , <b>2022</b> , 13, 866045 | 4.6  |
| 6  | Associations between high blood pressure and DNA methylation <b>2020</b> , 15, e0227728   |      |
| 5  | Associations between high blood pressure and DNA methylation <b>2020</b> , 15, e0227728   |      |
| 4  | Associations between high blood pressure and DNA methylation <b>2020</b> , 15, e0227728   |      |
| 3  | Associations between high blood pressure and DNA methylation <b>2020</b> , 15, e0227728   |      |
| 2  | Associations between high blood pressure and DNA methylation <b>2020</b> , 15, e0227728   |      |
|    |   |      |

Associations between high blood pressure and DNA methylation **2020**, 15, e0227728