

Piet Claus

List of Publications by Year in descending order

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263
papers

10,803
citations

28242

55
h-index

37183

96
g-index

265
all docs

265
docs citations

265
times ranked

10375
citing authors

#	ARTICLE	IF	CITATIONS
1	Strain and strain rate imaging: a new clinical approach to quantifying regional myocardial function. <i>Journal of the American Society of Echocardiography</i> , 2004, 17, 788-802.	1.2	575
2	Myocardial function defined by strain rate and strain during alterations in inotropic states and heart rate. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2002, 283, H792-H799.	1.5	353
3	Tissue Tracking Technology for Assessing Cardiac Mechanics. <i>JACC: Cardiovascular Imaging</i> , 2015, 8, 1444-1460.	2.3	343
4	Experimental Validation of a New Ultrasound Method for the Simultaneous Assessment of Radial and Longitudinal Myocardial Deformation Independent of Insonation Angle. <i>Circulation</i> , 2005, 112, 2157-2162.	1.6	314
5	Infective endocarditis: changing epidemiology and predictors of 6-month mortality: a prospective cohort study. <i>European Heart Journal</i> , 2006, 28, 196-203.	1.0	311
6	Principles of cardiovascular magnetic resonance feature tracking and echocardiographic speckle tracking for informed clinical use. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 18, 51.	1.6	279
7	Cardiac resynchronization therapy can reverse abnormal myocardial strain distribution in patients with heart failure and left bundle branch block. <i>Journal of the American College of Cardiology</i> , 2003, 42, 486-494.	1.2	219
8	Black Holes and Superconformal Mechanics. <i>Physical Review Letters</i> , 1998, 81, 4553-4556.	2.9	212
9	Toward understanding response to cardiac resynchronization therapy: left ventricular dyssynchrony is only one of multiple mechanisms. <i>European Heart Journal</i> , 2009, 30, 940-949.	1.0	211
10	Cardiac MRI. <i>Circulation: Cardiovascular Imaging</i> , 2013, 6, 329-338.	1.3	210
11	Remodeling of T-Tubules and Reduced Synchrony of Ca ²⁺ Release in Myocytes From Chronically Ischemic Myocardium. <i>Circulation Research</i> , 2008, 102, 338-346.	2.0	208
12	Atrial fibrillation is associated with the fibrotic remodelling of adipose tissue in the subepicardium of human and sheep atria. <i>European Heart Journal</i> , 2017, 38, 53-61.	1.0	198
13	Deformation imaging describes right ventricular function better than longitudinal displacement of the tricuspid ring. <i>Heart</i> , 2010, 96, 281-288.	1.2	186
14	Myocardial Dysfunction Late After Low-Dose Anthracycline Treatment in Asymptomatic Pediatric Patients. <i>Journal of the American Society of Echocardiography</i> , 2007, 20, 1351-1358.	1.2	174
15	Feasibility of strain and strain rate imaging for the assessment of regional left atrial deformation: A study in normal subjects. <i>European Journal of Echocardiography</i> , 2006, 7, 199-208.	2.3	173
16	Defining the Transmurality of a Chronic Myocardial Infarction by Ultrasonic Strain-Rate Imaging. <i>Circulation</i> , 2003, 107, 883-888.	1.6	170
17	Abscess in infective endocarditis: The value of transesophageal echocardiography and outcome. <i>American Heart Journal</i> , 2007, 154, 923-928.	1.2	169
18	Velocity and deformation imaging for the assessment of myocardial dysfunction. <i>European Journal of Echocardiography</i> , 2008, 10, 216-226.	2.3	150

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19	Three-Dimensional Cardiac Strain Estimation Using Spatio-temporal Elastic Registration of Ultrasound Images: A Feasibility Study. IEEE Transactions on Medical Imaging, 2008, 27, 1580-1591.	5.4	148
20	Exercise-induced right ventricular dysfunction is associated with ventricular arrhythmias in endurance athletes. European Heart Journal, 2015, 36, 1998-2010.	1.0	148
21	Quantification of regional right and left ventricular function by ultrasonic strain rate and strain indexes after surgical repair of tetralogy of fallot. American Journal of Cardiology, 2002, 90, 133-138.	0.7	145
22	Acute Cardiac Functional and Morphological Changes After Anthracycline Infusions in Children. American Journal of Cardiology, 2007, 99, 974-977.	0.7	135
23	Sildenafil Improves Exercise Hemodynamics in Fontan Patients. Circulation: Cardiovascular Imaging, 2014, 7, 265-273.	1.3	125
24	Accuracy of Echocardiography to Evaluate Pulmonary Vascular and RV Function During Exercise. JACC: Cardiovascular Imaging, 2016, 9, 532-543.	2.3	120
25	Changes in systolic left ventricular function in isolated mitral regurgitation. A strain rate imaging study. European Heart Journal, 2007, 28, 2627-2636.	1.0	118
26	Regional Right Ventricular Dysfunction in Chronic Pulmonary Hypertension. Journal of the American Society of Echocardiography, 2007, 20, 1172-1180.	1.2	117
27	A fast convolution-based methodology to simulate 2-D/3-D cardiac ultrasound images. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 404-409.	1.7	117
28	Early Regional Myocardial Dysfunction in Young Patients With Duchenne Muscular Dystrophy. Journal of the American Society of Echocardiography, 2008, 21, 1049-1054.	1.2	110
29	Investigating Cardiac Function Using Motion and Deformation Analysis in the Setting of Coronary Artery Disease. Circulation, 2007, 116, 2453-2464.	1.6	109
30	Differential Effects of Progenitor Cell Populations on Left Ventricular Remodeling and Myocardial Neovascularization After Myocardial Infarction. Journal of the American College of Cardiology, 2010, 55, 2232-2243.	1.2	104
31	M 5-brane and superconformal (0,2) tensor multiplet in six dimensions. Nuclear Physics B, 1998, 518, 117-150.	0.9	97
32	Improved regional function after autologous bone marrow-derived stem cell transfer in patients with acute myocardial infarction: a randomized, double-blind strain rate imaging study. European Heart Journal, 2008, 30, 662-670.	1.0	92
33	Evaluation of state-of-the-art segmentation algorithms for left ventricle infarct from late Gadolinium enhancement MR images. Medical Image Analysis, 2016, 30, 95-107.	7.0	90
34	The sequential changes in myocardial thickness and thickening which occur during acute transmural infarction, infarct reperfusion and the resultant expression of reperfusion injury. European Heart Journal, 2004, 25, 794-803.	1.0	87
35	Pulmonary Vascular and Right Ventricular Reserve in Patients With Normalized Resting Hemodynamics After Pulmonary Endarterectomy. Journal of the American Heart Association, 2015, 4, e001602.	1.6	87
36	Ultrasonic Strain Rate and Strain Imaging of the Right Ventricle in Children Before and After Percutaneous Closure of an Atrial Septal Defect. Journal of the American Society of Echocardiography, 2006, 19, 994-1000.	1.2	82

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37	Regional myocardial deformation in children with hypertrophic cardiomyopathy: morphological and clinical correlations. <i>European Heart Journal</i> , 2007, 28, 2886-2894.	1.0	78
38	Subepicardial delayed gadolinium enhancement in asymptomatic athletes: let sleeping dogs lie?. <i>British Journal of Sports Medicine</i> , 2016, 50, 111-117.	3.1	78
39	The potential clinical role of ultrasonic strain and strain rate imaging in diagnosing acute rejection after heart transplantation. <i>European Journal of Echocardiography</i> , 2007, 8, 213-221.	2.3	76
40	Experimental assessment of a new research tool for the estimation of two-dimensional myocardial strain. <i>Ultrasound in Medicine and Biology</i> , 2006, 32, 1509-1513.	0.7	75
41	RF-based two-dimensional cardiac strain estimation: a validation study in a tissue-mimicking phantom. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2004, 51, 1537-1546.	1.7	73
42	Long-Term Incremental Prognostic Value of Cardiovascular Magnetic Resonance After ST-Segment Elevation Myocardial Infarction. <i>JACC: Cardiovascular Imaging</i> , 2018, 11, 813-825.	2.3	73
43	Right Ventricular Fatigue Developing during Endurance Exercise. <i>Medicine and Science in Sports and Exercise</i> , 2014, 46, 1717-1726.	0.2	72
44	Myocardial deformation abnormalities in patients with aortic regurgitation: a strain rate imaging study. <i>European Journal of Echocardiography</i> , 2009, 10, 112-119.	2.3	70
45	Conformal theory of M2, D3, M5 and 'D1+D5' branes. <i>Journal of High Energy Physics</i> , 1998, 1998, 004-004.	1.6	67
46	Left ventricular global myocardial strain assessment comparing the reproducibility of four commercially available CMR-feature tracking algorithms. <i>European Radiology</i> , 2018, 28, 5137-5147.	2.3	65
47	Interaction between respiration and right versus left ventricular volumes at rest and during exercise: a real-time cardiac magnetic resonance study. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2014, 306, H816-H824.	1.5	64
48	Safety and Efficacy of Intracoronary Infusion of Allogeneic Human Cardiac Stem Cells in Patients With ST-Segment Elevation Myocardial Infarction and Left Ventricular Dysfunction. <i>Circulation Research</i> , 2018, 123, 579-589.	2.0	64
49	Two-dimensional speckle tracking echocardiography: standardization efforts based on synthetic ultrasound data. <i>European Heart Journal Cardiovascular Imaging</i> , 2016, 17, 693-701.	0.5	63
50	Cellular Mechanisms of Contractile Dysfunction in Hibernating Myocardium. <i>Circulation Research</i> , 2004, 94, 794-801.	2.0	62
51	New aspects of the ventricular septum and its function: an echocardiographic study. <i>Heart</i> , 2005, 91, 1343-1348.	1.2	62
52	Mechanisms of Postsystolic Thickening in Ischemic Myocardium: Mathematical Modelling and Comparison With Experimental Ischemic Substrates. <i>Ultrasound in Medicine and Biology</i> , 2007, 33, 1963-1970.	0.7	61
53	The influence of pulmonary regurgitation on regional right ventricular function in children after surgical repair of tetralogy of Fallot. <i>European Journal of Echocardiography</i> , 2010, 11, 341-345.	2.3	61
54	Global fibroblast activation throughout the left ventricle but localized fibrosis after myocardial infarction. <i>Scientific Reports</i> , 2017, 7, 10801.	1.6	59

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55	One-dimensional ultrasonic strain and strain rate imaging: a new approach to the quantitation of regional myocardial function in patients with aortic stenosis. <i>Ultrasound in Medicine and Biology</i> , 2003, 29, 1085-1092.	0.7	58
56	Ultrasound-based radial and longitudinal strain estimation of the carotid artery: a feasibility study. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2011, 58, 2244-2251.	1.7	57
57	Management of Prosthetic Valve Infective Endocarditis. <i>American Journal of Cardiology</i> , 2008, 101, 1174-1178.	0.7	56
58	Pathophysiology of Renal Hemodynamics and Renal Cortical Microcirculation in a Porcine Model of Elevated Intra-abdominal Pressure. <i>Journal of Trauma</i> , 2009, 66, 713-719.	2.3	56
59	Heart Rate Reserve in Fontan Patients: Chronotropic Incompetence or Hemodynamic Limitation?. <i>Journal of the American Heart Association</i> , 2019, 8, e012008.	1.6	56
60	Impaired Cardiac Reserve and Abnormal Vascular Load Limit Exercise Capacity in Chronic Thromboembolic Disease. <i>JACC: Cardiovascular Imaging</i> , 2019, 12, 1444-1456.	2.3	56
61	Quantification of regional right and left ventricular function by ultrasonic strain rate and strain indexes in Friedreich's ataxia. <i>American Journal of Cardiology</i> , 2003, 91, 622-626.	0.7	55
62	Risk Factors for Infective Endocarditis and Outcome of Patients With Staphylococcus aureus Bacteremia. <i>Mayo Clinic Proceedings</i> , 2007, 82, 1165-1169.	1.4	55
63	Elastic Image Registration Versus Speckle Tracking for 2-D Myocardial Motion Estimation: A Direct Comparison In Vivo. <i>IEEE Transactions on Medical Imaging</i> , 2013, 32, 449-459.	5.4	55
64	Impact of active smoking on myocardial infarction severity in reperfused ST-segment elevation myocardial infarction patients: the smoker's paradox revisited. <i>European Heart Journal</i> , 2016, 37, 2756-2764.	1.0	55
65	Incremental Value of the En Face View of the Tricuspid Valve by Two-Dimensional and Three-Dimensional Echocardiography for Accurate Identification of Tricuspid Valve Leaflets. <i>Journal of the American Society of Echocardiography</i> , 2014, 27, 376-384.	1.2	54
66	Can regional strain and strain rate measurement be performed during both dobutamine and exercise echocardiography, and do regional deformation responses differ with different forms of stress testing?. <i>Journal of the American Society of Echocardiography</i> , 2003, 16, 299-308.	1.2	51
67	Quantifying myocardial deformation throughout the cardiac cycle: a comparison of ultrasound strain rate, grey-scale M-mode and magnetic resonance imaging. <i>Ultrasound in Medicine and Biology</i> , 2004, 30, 591-598.	0.7	51
68	Clinical and echocardiographic risk factors for embolism and mortality in infective endocarditis. <i>European Journal of Clinical Microbiology and Infectious Diseases</i> , 2008, 27, 1159-1164.	1.3	49
69	Methicillin-resistant versus methicillin-sensitive Staphylococcus aureus infective endocarditis. <i>European Journal of Clinical Microbiology and Infectious Diseases</i> , 2008, 27, 445-450.	1.3	48
70	Exercise cardiac magnetic resonance to differentiate athlete's heart from structural heart disease. <i>European Heart Journal Cardiovascular Imaging</i> , 2018, 19, 1062-1070.	0.5	48
71	Regional cardiac motion and strain estimation in three-dimensional echocardiography: a validation study in thick-walled univentricular phantoms. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2012, 59, 668-682.	1.7	47
72	Hyperactive ryanodine receptors in human heart failure and ischaemic cardiomyopathy reside outside of couplons. <i>Cardiovascular Research</i> , 2018, 114, 1512-1524.	1.8	47

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73	Rationale and Design of a Clinical Trial to Evaluate the Safety and Efficacy of Intracoronary Infusion of Allogeneic Human Cardiac Stem Cells in Patients With Acute Myocardial Infarction and Left Ventricular Dysfunction. <i>Circulation Research</i> , 2017, 121, 71-80.	2.0	46
74	The Evaluation of Pulmonary Hypertension Using Right Ventricular Myocardial Isovolumic Relaxation Time. <i>Journal of the American Society of Echocardiography</i> , 2005, 18, 1113-1120.	1.2	42
75	Inter-vendor reproducibility and accuracy of segmental left ventricular strain measurements using CMR feature tracking. <i>European Radiology</i> , 2019, 29, 6846-6857.	2.3	42
76	Persistent Impairment in Cardiopulmonary Fitness after Breast Cancer Chemotherapy. <i>Medicine and Science in Sports and Exercise</i> , 2019, 51, 1573-1581.	0.2	42
77	Geometric Assessment of Asymmetric Septal Hypertrophic Cardiomyopathy by CMR. <i>JACC: Cardiovascular Imaging</i> , 2012, 5, 702-711.	2.3	41
78	Left Ventricular Remodeling Results in Homogenization of Myocardial Work Distribution. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2019, 12, e007224.	2.1	39
79	Outcome of Patients Requiring Valve Surgery During Active Infective Endocarditis. <i>Annals of Thoracic Surgery</i> , 2008, 85, 1564-1569.	0.7	38
80	Exercise pathophysiology and sildenafil effects in chronic thromboembolic pulmonary hypertension. <i>Heart</i> , 2015, 101, 637-644.	1.2	38
81	Super M-brane actions in AdS ₄ —S ₇ and AdS ₇ —S ₄ . <i>Physical Review D</i> , 1999, 59, .	1.6	37
82	Effects of inhaled iloprost on right ventricular contractility, right ventriculo-vascular coupling and ventricular interdependence: a randomized placebo-controlled trial in an experimental model of acute pulmonary hypertension. <i>Critical Care</i> , 2008, 12, R113.	2.5	37
83	How to optimize intracardiac blood flow tracking by echocardiographic particle image velocimetry? Exploring the influence of data acquisition using computer-generated data sets. <i>European Heart Journal Cardiovascular Imaging</i> , 2012, 13, 490-499.	0.5	37
84	Nitric oxide for inhalation in ST-elevation myocardial infarction (NOMI): a multicentre, double-blind, randomized controlled trial. <i>European Heart Journal</i> , 2018, 39, 2717-2725.	1.0	37
85	Supertwistors as quarks of SU(2,2 4). <i>Journal of High Energy Physics</i> , 1999, 1999, 019-019.	1.6	35
86	Late post-repair ventricular function in patients with origin of the left main coronary artery from the pulmonary trunk. <i>American Journal of Cardiology</i> , 2004, 93, 506-508.	0.7	35
87	In Utero Exposure to Chemotherapy: Effect on Cardiac and Neurologic Outcome. <i>Journal of Clinical Oncology</i> , 2006, 24, e16-e17.	0.8	35
88	Relationship between Abdominal Pressure, Pulmonary Compliance, and Cardiac Preload in a Porcine Model. <i>Critical Care Research and Practice</i> , 2012, 2012, 1-6.	0.4	35
89	Arrhythmogenicity of fibro-fatty infiltrations. <i>Scientific Reports</i> , 2018, 8, 2050.	1.6	35
90	Influence of left-ventricular shape on passive filling properties and end-diastolic fiber stress and strain. <i>Journal of Biomechanics</i> , 2010, 43, 1745-1753.	0.9	33

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91	Histological correlate of a cardiac magnetic resonance imaged microvascular obstruction in a porcine model of ischemiaâ€“reperfusion. <i>Cardiovascular Pathology</i> , 2012, 21, 129-131.	0.7	33
92	Cyclosporine A reduces microvascular obstruction and preserves left ventricular function deterioration following myocardial ischemia and reperfusion. <i>Basic Research in Cardiology</i> , 2015, 110, 18.	2.5	33
93	The vector-tensor supermultiplet with gauged central charge. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1996, 373, 81-88.	1.5	32
94	Superisometries of the AdS \tilde{S} superspace. <i>Journal of High Energy Physics</i> , 1999, 1999, 014-014.	1.6	30
95	Differential changes in regional right ventricular function before and after a bilateral lung transplantation: an ultrasonic strain and strain rate study. <i>Journal of the American Society of Echocardiography</i> , 2003, 16, 432-436.	1.2	30
96	Elastic Image Registration to Quantify 3-D Regional Myocardial Deformation from Volumetric Ultrasound: Experimental Validation in an Animal Model. <i>Ultrasound in Medicine and Biology</i> , 2013, 39, 1688-1697.	0.7	30
97	Reproduction of Continuous Flow Left Ventricular Assist Device Experimental Data by Means of a Hybrid Cardiovascular Model With Baroreflex Control. <i>Artificial Organs</i> , 2014, 38, 456-468.	1.0	30
98	Reduced Force Generating Capacity in Myocytes From Chronically Ischemic, Hibernating Myocardium. <i>Circulation Research</i> , 2007, 100, 229-237.	2.0	29
99	Left-ventricular shape determines intramyocardial mechanical heterogeneity. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2011, 301, H2351-H2361.	1.5	29
100	How to distinguish between ischemic and nonischemic postsystolic thickening: A strain rate imaging study. <i>Ultrasound in Medicine and Biology</i> , 2006, 32, 53-59.	0.7	28
101	Ultrasonic strain/strain rate imagingâ€“a new clinical tool to evaluate the transplanted heart. <i>European Journal of Echocardiography</i> , 2005, 6, 186-195.	2.3	26
102	Comparison of a new methodology for the assessment of 3D myocardial strain from volumetric ultrasound with 2D speckle tracking. <i>International Journal of Cardiovascular Imaging</i> , 2012, 28, 1049-1060.	0.7	26
103	Atrial volume and function during exercise in health and disease. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2016, 19, 104.	1.6	25
104	Anatomical Image Registration Using Volume Conservation to Assess Cardiac Deformation From 3D Ultrasound Recordings. <i>IEEE Transactions on Medical Imaging</i> , 2016, 35, 501-511.	5.4	24
105	Determinants of exercise intolerance in breast cancer patients prior to anthracycline chemotherapy. <i>Physiological Reports</i> , 2019, 7, e13971.	0.7	23
106	Differential effects of lumbar and thoracic epidural anaesthesia on the haemodynamic response to acute right ventricular pressure overload. <i>British Journal of Anaesthesia</i> , 2010, 104, 143-149.	1.5	22
107	Determining optimal noninvasive parameters for the prediction of left ventricular remodeling in chronic ischemic patients. <i>Scandinavian Cardiovascular Journal</i> , 2013, 47, 329-334.	0.4	22
108	Exercise cardiovascular magnetic resonance reveals reduced cardiac reserve in pediatric cancer survivors with impaired cardiopulmonary fitness. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2020, 22, 64.	1.6	22

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109	Reduced mitochondrial respiration in the ischemic as well as in the remote nonischemic region in postmyocardial infarction remodeling. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2016, 311, H1075-H1090.	1.5	21
110	Outcome of arterial switch operation for transposition of the great arteries. A 35-year follow-up study. <i>International Journal of Cardiology</i> , 2020, 316, 94-100.	0.8	21
111	Ventricular Arrhythmias in Ischemic Cardiomyopathy—New Avenues for Mechanism-Guided Treatment. <i>Cells</i> , 2021, 10, 2629.	1.8	21
112	A simple particle action from a twistor parametrization of AdS5. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1999, 466, 181-189.	1.5	20
113	Myocardial deformation abnormalities in paediatric hypertrophic cardiomyopathy: are all aetiologies identical?. <i>European Journal of Echocardiography</i> , 2008, 9, 784-790.	2.3	20
114	Altered adrenergic response in myocytes bordering a chronic myocardial infarction underlies in vivo triggered activity and repolarization instability. <i>Journal of Physiology</i> , 2020, 598, 2875-2895.	1.3	20
115	Alterations of Systolic Left Ventricular Twist after Acute Myocardial Infarction. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2002, 283, H2733-H2734.	1.5	19
116	Left Ventricular Myocardial Segmentation in 3-D Ultrasound Recordings: Effect of Different Endocardial and Epicardial Coupling Strategies. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2017, 64, 525-536.	1.7	19
117	Right ventricular systolic dysfunction at rest is not related to decreased exercise capacity in patients with a systemic right ventricle. <i>International Journal of Cardiology</i> , 2018, 260, 66-71.	0.8	19
118	Oxygen Pathway Limitations in Patients With Chronic Thromboembolic Pulmonary Hypertension. <i>Circulation</i> , 2021, 143, 2061-2073.	1.6	19
119	Real-time 3D interactive segmentation of echocardiographic data through user-based deformation of B-spline explicit active surfaces. <i>Computerized Medical Imaging and Graphics</i> , 2014, 38, 57-67.	3.5	17
120	Exercise physiology with a left ventricular assist device: Analysis of heart-pump interaction with a computational simulator. <i>PLoS ONE</i> , 2017, 12, e0181879.	1.1	17
121	Advanced Imaging to Phenotype Patients With a Systemic Right Ventricle. <i>Journal of the American Heart Association</i> , 2018, 7, e009185.	1.6	17
122	Post-Systolic Thickening in Ischaemic Myocardium: A Simple Mathematical Model for Simulating Regional Deformation. <i>Lecture Notes in Computer Science</i> , 2001, , 134-139.	1.0	17
123	BRST quantization of a particle in AdS5. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1999, 462, 285-293.	1.5	16
124	Thoracic epidural anaesthesia disrupts the protective mechanism of homeometric autoregulation during right ventricular pressure overload by cardiac sympathetic blockade: a randomised controlled animal study. <i>European Journal of Anaesthesiology</i> , 2011, 28, 535-543.	0.7	16
125	Non-invasive characterization of the area-at-risk using magnetic resonance imaging in chronic ischaemia. <i>Cardiovascular Research</i> , 2011, 89, 166-174.	1.8	16
126	Discrete sites of frequent premature ventricular complexes cluster within the infarct border zone and coincide with high frequency of delayed afterdepolarizations under adrenergic stimulation. <i>Heart Rhythm</i> , 2021, 18, 1976-1987.	0.3	16

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127	Clec4e-Receptor Signaling in Myocardial Repair After Ischemia-Reperfusion Injury. <i>JACC Basic To Translational Science</i> , 2021, 6, 631-646.	1.9	16
128	Effect of respiration on cardiac filling at rest and during exercise in Fontan patients: A clinical and computational modeling study. <i>IJC Heart and Vasculature</i> , 2015, 9, 100-108.	0.6	15
129	Low-flow support of the chronic pressure-overloaded right ventricle induces reversed remodeling. <i>Journal of Heart and Lung Transplantation</i> , 2018, 37, 151-160.	0.3	15
130	Right ventricular strain rate during exercise accurately identifies male athletes with right ventricular arrhythmias. <i>European Heart Journal Cardiovascular Imaging</i> , 2020, 21, 282-290.	0.5	15
131	Left ventricular global myocardial strain assessment: Are CMR feature-tracking algorithms useful in the clinical setting?. <i>Radiologia Medica</i> , 2020, 125, 444-450.	4.7	15
132	Do we understand who benefits from resynchronisation therapy?. <i>European Heart Journal</i> , 2004, 25, 535-536.	1.0	14
133	Interventricular interaction as a possible mechanism for the presence of a biphasic systolic velocity profile in normal left ventricular free walls. <i>Heart</i> , 2008, 94, 1058-1064.	1.2	14
134	Microvolt T-wave alternans and beat-to-beat variability of repolarization during early postischemic remodeling in a pig heart. <i>Heart Rhythm</i> , 2011, 8, 1050-1057.	0.3	14
135	The Slope of the Segmental Stretch-Strain Relationship as a Noninvasive Index of LV Inotropy. <i>JACC: Cardiovascular Imaging</i> , 2013, 6, 419-428.	2.3	14
136	Multi-centre validation of an automatic algorithm for fast 4D myocardial segmentation in cine CMR datasets. <i>European Heart Journal Cardiovascular Imaging</i> , 2016, 17, 1118-1127.	0.5	14
137	Early or deferred cardiovascular magnetic resonance after ST-segment-elevation myocardial infarction for effective risk stratification. <i>European Heart Journal Cardiovascular Imaging</i> , 2020, 21, 632-639.	0.5	14
138	The Feasibility of Ultrasonic Regional Strain and Strain Rate Imaging in Quantifying Dobutamine Stress Echocardiography. <i>European Journal of Echocardiography</i> , 2003, 4, 81-91.	2.3	14
139	Tangential sound field oscillations for 2D motion estimation in echocardiography. , 2009, , .		12
140	Three-Dimensional Cardiac Motion Estimation Based on Non-rigid Image Registration Using a Novel Transformation Model Adapted to the Heart. <i>Lecture Notes in Computer Science</i> , 2013, , 142-150.	1.0	12
141	Myocyte Remodeling Due to Fibro-Fatty Infiltrations Influences Arrhythmogenicity. <i>Frontiers in Physiology</i> , 2018, 9, 1381.	1.3	12
142	Robust motion correction for cardiac T1 and ECV mapping using a T1 relaxation model approach. <i>Medical Image Analysis</i> , 2019, 52, 212-227.	7.0	12
143	Mechano-biological adaptation of the pulmonary artery exposed to systemic conditions. <i>Scientific Reports</i> , 2020, 10, 2724.	1.6	12
144	The quantification of dipyridamole induced changes in regional deformation in normal, stunned or infarcted myocardium as measured by strain and strain rate: an experimental study. <i>International Journal of Cardiovascular Imaging</i> , 2008, 24, 365-376.	0.7	11

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145	Geometric Regularization for 2-D Myocardial Strain Quantification in Mice: An In-Silico Study. <i>Ultrasound in Medicine and Biology</i> , 2010, 36, 1157-1168.	0.7	11
146	Cardiac Motion and Deformation Estimation from Tagged MRI Sequences Using a Temporal Coherent Image Registration Framework. <i>Lecture Notes in Computer Science</i> , 2013, , 316-324.	1.0	11
147	Echocardiographic assessment of left ventricular untwist rate: comparison of tissue Doppler and speckle tracking methodologies. <i>European Journal of Echocardiography</i> , 2009, 10, 683-690.	2.3	10
148	Closed-chest animal model of chronic coronary artery stenosis. Assessment with magnetic resonance imaging. <i>International Journal of Cardiovascular Imaging</i> , 2010, 26, 299-308.	0.7	10
149	Placental growth factor increases regional myocardial blood flow and contractile function in chronic myocardial ischemia. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2013, 304, H885-H894.	1.5	10
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