Piet Claus

List of Publications by Year
in descending order

263 papers	10,803 citations	28274 55 h-index	37204 96 g-index
265 all docs	265 docs citations	265 times ranked	10375 citing authors

#	Article	IF	Citations
1	Adverse functional remodelling of the subpulmonary left ventricle in patients with a systemic right ventricle is associated with clinical outcome. European Heart Journal Cardiovascular Imaging, 2022, 23, 680-688.	1.2	6
2	Can nuclear imaging accurately detect scar in ischemic cardiac resynchronization therapy candidates?. Nuclear Medicine Communications, 2022, Publish Ahead of Print, .	1.1	0
3	Impaired biventricular contractile reserve in patients with diastolic dysfunction: insights from exercise stress echocardiography. European Heart Journal Cardiovascular Imaging, 2022, 23, 1042-1052.	1.2	3
4	Impact of left bundle branch block on myocardial perfusion and metabolism: A positron emission tomography study. Journal of Nuclear Cardiology, 2021, 28, 1730-1739.	2.1	6
5	15-Year follow-up of regional right and left ventricular function after the Senning operation: a Colour-Doppler myocardial imaging study. Acta Cardiologica, 2021, 76, 689-696.	0.9	1
6	Left ventricular regional glucose metabolism in combination with septal scar extent identifies CRT responders. European Journal of Nuclear Medicine and Molecular Imaging, 2021, 48, 2437-2446.	6.4	1
7	Endurance exercise and the risk of cardiovascular pathology in men: a comparison between lifelong and late-onset endurance training and a non-athletic lifestyle - rationale and design of the Master@Heart study, a prospective cohort trial. BMJ Open Sport and Exercise Medicine, 2021, 7, e001048.	2.9	4
8	Oxygen Pathway Limitations in Patients With Chronic Thromboembolic Pulmonary Hypertension. Circulation, 2021, 143, 2061-2073.	1.6	19
9	Back to the root: a large animal model of the Ross procedure. Annals of Cardiothoracic Surgery, 2021, 10, 444-453.	1.7	3
10	Discrete sites of frequent premature ventricular complexes cluster within the infarct border zone and coincide with high frequency of delayed afterdepolarizations under adrenergic stimulation. Heart Rhythm, 2021, 18, 1976-1987.	0.7	16
11	Clec4e-Receptor Signaling in Myocardial Repair After Ischemia-Reperfusion Injury. JACC Basic To Translational Science, 2021, 6, 631-646.	4.1	16
12	Right ventricular and cyclic guanosine monophosphate signalling abnormalities in stages B and C of heart failure with preserved ejection fraction. ESC Heart Failure, 2021, , .	3.1	4
13	Ventricular Arrhythmias in Ischemic Cardiomyopathyâ€"New Avenues for Mechanism-Guided Treatment. Cells, 2021, 10, 2629.	4.1	21
14	Right ventricular strain rate during exercise accurately identifies male athletes with right ventricular arrhythmias. European Heart Journal Cardiovascular Imaging, 2020, 21, 282-290.	1.2	15
15	Analysis of partial volume correction on quantification and regional heterogeneity in cardiac PET. Journal of Nuclear Cardiology, 2020, 27, 62-70.	2.1	2
16	Early or deferred cardiovascular magnetic resonance after ST-segment-elevation myocardial infarction for effective risk stratification. European Heart Journal Cardiovascular Imaging, 2020, 21, 632-639.	1.2	14
17	Altered adrenergic response in myocytes bordering a chronic myocardial infarction underlies in vivo triggered activity and repolarization instability. Journal of Physiology, 2020, 598, 2875-2895.	2.9	20
18	Exercise cardiovascular magnetic resonance reveals reduced cardiac reserve in pediatric cancer survivors with impaired cardiopulmonary fitness. Journal of Cardiovascular Magnetic Resonance, 2020, 22, 64.	3.3	22

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19	Left ventricular global myocardial strain assessment: Are CMR feature-tracking algorithms useful in the clinical setting?. Radiologia Medica, 2020, 125, 444-450.	7.7	15
20	Experimental validation of the prestretch-strain relationship as a non-invasive index of left ventricular myocardial contractility. PLoS ONE, 2020, 15, e0228027.	2.5	0
21	Mechano-biological adaptation of the pulmonary artery exposed to systemic conditions. Scientific Reports, 2020, 10, 2724.	3.3	12
22	Outcome of arterial switch operation for transposition of the great arteries. A 35-year follow-up study. International Journal of Cardiology, 2020, 316, 94-100.	1.7	21
23	3D Left Ventricular Segmentation from 2D Cardiac MR Images Using Spatial Context. Lecture Notes in Computer Science, 2020, , 90-99.	1.3	1
24	Area of the pressure-strain loop during ejection as non-invasive index of left ventricular performance: a population study. Cardiovascular Ultrasound, 2019, 17, 15.	1.6	8
25	Inter-vendor reproducibility and accuracy of segmental left ventricular strain measurements using CMR feature tracking. European Radiology, 2019, 29, 6846-6857.	4.5	42
26	Unsupervised respiratory signal extraction from ungated cardiac magnetic resonance imaging at rest and during exercise. Physics in Medicine and Biology, 2019, 64, 065001.	3.0	7
27	Partial volume and motion correction in cardiac PET: First results from an in vs ex vivo comparison using animal datasets. Journal of Nuclear Cardiology, 2019, 26, 2034-2044.	2.1	3
28	Heart Rate Reserve in Fontan Patients: Chronotropic Incompetence or Hemodynamic Limitation?. Journal of the American Heart Association, 2019, 8, e012008.	3.7	56
29	Non-invasive myocardial performance mapping using 3D echocardiographic stressâ€“strain loops. Physics in Medicine and Biology, 2019, 64, 115026.	3.0	1
30	Left Ventricular Remodeling Results in Homogenization of Myocardial Work Distribution. Circulation: Arrhythmia and Electrophysiology, 2019, 12, e007224.	4.8	39
31	Creation of the Fontan circulation in sheep: a survival model. Interactive Cardiovascular and Thoracic Surgery, 2019, 29, 15-21.	1.1	8
32	Persistent Impairment in Cardiopulmonary Fitness after Breast Cancer Chemotherapy. Medicine and Science in Sports and Exercise, 2019, 51, 1573-1581.	0.4	42
33	Impaired Cardiac Reserve and Abnormal Vascular Load Limit Exercise Capacity in Chronic Thromboembolic Disease. JACC: Cardiovascular Imaging, 2019, 12, 1444-1456.	5.3	56
34	Robust motion correction for cardiac T1 and ECV mapping using a T1 relaxation model approach. Medical Image Analysis, 2019, 52, 212-227.	11.6	12
35	Determinants of exercise intolerance in breast cancer patients prior to anthracycline chemotherapy. Physiological Reports, 2019, 7, e13971.	1.7	23
36	Papillary muscles contribute significantly more to left ventricular work in dilated hearts. European Heart Journal Cardiovascular Imaging, 2019, 20, 84-91.	1.2	6

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37	Low septal to lateral wall 18F-FDG ratio is highly associated with mechanical dyssynchrony in non-ischemic CRT candidates. EJNMMI Research, 2019, 9, 105.	2.5	5
38	Sheep can be used as animal model of regional myocardial remodeling and controllable work. Cardiology Journal, 2019, 26, 375-384.	1.2	7
39	Quantitative and qualitative assessment of acute myocardial injury by CMR at multiple time points after acute myocardial infarction. International Journal of Cardiology, 2018, 259, 43-46.	1.7	3
40	Hyperactive ryanodine receptors in human heart failure and ischaemic cardiomyopathy reside outside of couplons. Cardiovascular Research, 2018, 114, 1512-1524.	3.8	47
41	Arrhythmogenicity of fibro-fatty infiltrations. Scientific Reports, 2018, 8, 2050.	3.3	35
42	Exercise cardiac magnetic resonance to differentiate athleteâ€™s heart from structural heart disease. European Heart Journal Cardiovascular Imaging, 2018, 19, 1062-1070.	1.2	48
43	Right ventricular systolic dysfunction at rest is not related to decreased exercise capacity in patients with a systemic right ventricle. International Journal of Cardiology, 2018, 260, 66-71.	1.7	19
44	Low-flow support of the chronic pressureâ€“overloaded right ventricle induces reversed remodeling. Journal of Heart and Lung Transplantation, 2018, 37, 151-160.	0.6	15
45	Long-Term Incremental Prognostic ValueÂof Cardiovascular Magnetic Resonance After ST-Segment Elevation Myocardial Infarction. JACC: Cardiovascular Imaging, 2018, 11, 813-825.	5.3	73
46	Advanced Imaging to Phenotype Patients With a Systemic Right Ventricle. Journal of the American Heart Association, 2018, 7, e009185.	3.7	17
47	Myocyte Remodeling Due to Fibro-Fatty Infiltrations Influences Arrhythmogenicity. Frontiers in Physiology, 2018, 9, 1381.	2.8	12
48	Nitric oxide for inhalation in ST-elevation myocardial infarction (NOMI): a multicentre, double-blind, randomized controlled trial. European Heart Journal, 2018, 39, 2717-2725.	2.2	37
49	Left ventricular global myocardial strain assessment comparing the reproducibility of four commercially available CMR-feature tracking algorithms. European Radiology, 2018, 28, 5137-5147.	4.5	65
50	Safety and Efficacy of Intracoronary Infusion of Allogeneic Human Cardiac Stem Cells in Patients With ST-Segment Elevation Myocardial Infarction and Left Ventricular Dysfunction. Circulation Research, 2018, 123, 579-589.	4.5	64
51	Atrial fibrillation is associated with the fibrotic remodelling of adipose tissue in the subepicardium of human and sheep atria. European Heart Journal, 2017, 38, 53-61.	2.2	198
52	Right ventricular and pulmonary vascular reserve in asymptomatic BMPR2 mutation carriers. Journal of Heart and Lung Transplantation, 2017, 36, 148-156.	0.6	8
53	Noninvasive Estimation of the Severity of Aortic Stenosis. Circulation: Cardiovascular Imaging, 2017, 10, .	2.6	1
54	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. Circulation Research, 2017, 121, 71-80.	4.5	46

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55	Left Ventricular Myocardial Segmentation in 3-D Ultrasound Recordings: Effect of Different Endocardial and Epicardial Coupling Strategies. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 525-536.	3.0	19
56	Global fibroblast activation throughout the left ventricle but localized fibrosis after myocardial infarction. Scientific Reports, 2017, 7, 10801.	3.3	59
57	Exercise physiology with a left ventricular assist device: Analysis of heart-pump interaction with a computational simulator. PLoS ONE, 2017, 12, e0181879.	2.5	17
58	Robust Model-Based Registration of Cardiac MR Images for T1 and ECV Mapping. Lecture Notes in Computer Science, 2017, , 42-50.	1.3	0
59	Automatic short axis orientation of the left ventricle in 3D ultrasound recordings. , 2016, , .		4
60	Principles of cardiovascular magnetic resonance feature tracking and echocardiographic speckle tracking for informed clinical use. Journal of Cardiovascular Magnetic Resonance, 2016, 18, 51.	3.3	279
61	Reduced mitochondrial respiration in the ischemic as well as in the remote nonischemic region in postmyocardial infarction remodeling. American Journal of Physiology - Heart and Circulatory Physiology, 2016, 311, H1075-H1090.	3.2	21
62	Lesion quantification and detection in myocardial 18F-FDG PET using edge-preserving priors and anatomical information from CT and MRI: a simulation study. EJNMMI Physics, 2016, 3, 9.	2.7	5
63	Impact of active smoking on myocardial infarction severity in reperfused ST-segment elevation myocardial infarction patients: the smoker's paradox revisited. European Heart Journal, 2016, 37, 2756-2764.	2.2	55
64	Impact of CT-based Attenuation Correction on the Registration Between Dual-gated Cardiac PET and High-Resolution CT. IEEE Transactions on Nuclear Science, 2016, 63, 180-192.	2.0	8
65	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.	11.6	90
66	Functional and molecular correlative imaging in a patient with amyloidosis. European Heart Journal, 2016, 37, 1834-1834.	2.2	3
67	Placental growth factor 2 â€" A potential therapeutic strategy for chronic myocardial ischemia. International Journal of Cardiology, 2016, 203, 534-542.	1.7	4
68	Subepicardial delayed gadolinium enhancement in asymptomatic athletes: let sleeping dogs lie?. British Journal of Sports Medicine, 2016, 50, 111-117.	6.7	78
69	Anatomical Image Registration Using Volume Conservation to Assess Cardiac Deformation From 3D Ultrasound Recordings. IEEE Transactions on Medical Imaging, 2016, 35, 501-511.	8.9	24
70	Accuracy of Echocardiography to EvaluateÂPulmonary Vascular and RVÂFunction During Exercise. JACC: Cardiovascular Imaging, 2016, 9, 532-543.	5.3	120
71	Multi-centre validation of an automatic algorithm for fast 4D myocardial segmentation in cine CMR datasets. European Heart Journal Cardiovascular Imaging, 2016, 17, 1118-1127.	1.2	14
72	Two-dimensional speckle tracking echocardiography: standardization efforts based on synthetic ultrasound data. European Heart Journal Cardiovascular Imaging, 2016, 17, 693-701.	1.2	63

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73	Atrial volume and function during exercise in health and disease. Journal of Cardiovascular Magnetic Resonance, 2016, 19, 104.	3.3	25
74	Impact of active smoking on myocardial infarction severity in reperfused ST-segment elevation myocardial infarction patients. The smoker's paradox revisited by CMR. Journal of Cardiovascular Magnetic Resonance, 2015, 17, Q62.	3.3	0
75	Tissue Tracking Technology for Assessing Cardiac Mechanics. JACC: Cardiovascular Imaging, 2015, 8, 1444-1460.	5.3	343
76	Pulmonary Vascular and Right Ventricular Reserve in Patients With Normalized Resting Hemodynamics After Pulmonary Endarterectomy. Journal of the American Heart Association, 2015, 4, e001602.	3.7	87
77	Automatic mitral annulus tracking in volumetric ultrasound using non-rigid image registration. , 2015, 2015, 1985-8.		4
78	Exercise pathophysiology and sildenafil effects in chronic thromboembolic pulmonary hypertension. Heart, 2015, 101, 637-644.	2.9	38
79	Cyclosporine A reduces microvascular obstruction and preserves left ventricular function deterioration following myocardial ischemia and reperfusion. Basic Research in Cardiology, 2015, 110, 18.	5.9	33
80	Exercise-induced right ventricular dysfunction is associated with ventricular arrhythmias in endurance athletes. European Heart Journal, 2015, 36, 1998-2010.	2.2	148
81	Lower myocardial stress perfusion in infarct-adjacent than in remote myocardium four months after revascularized myocardial infarction. Journal of Cardiovascular Magnetic Resonance, 2015, 17, .	3.3	0
82	Lower myocardial perfusion in borderzones in the area at risk than out of the area at risk in acute myocardial infarction. Journal of Cardiovascular Magnetic Resonance, 2015, 17, .	3.3	0
83	Shared versus non-shared prepulse perfusion MR sequence in absolute myocardial perfusion quantification. Journal of Cardiovascular Magnetic Resonance, 2015, 17, .	3.3	0
84	Cardiac magnetic resonance dual bolus myocardial perfusion quantification superior to the single bolus analysis method. Journal of Cardiovascular Magnetic Resonance, 2015, 17, P58.	3.3	0
85	T-Wave Alternans Is Linked to Microvascular Obstruction and to Recurrent Coronary Ischemia After Myocardial Infarction. Journal of Cardiovascular Translational Research, 2015, 8, 484-492.	2.4	1
86	Right ventricular suction: an important determinant of cardiac performance. Cardiovascular Research, 2015, 107, 7-8.	3.8	4
87	Effect of respiration on cardiac filling at rest and during exercise in Fontan patients: A clinical and computational modeling study. IJC Heart and Vasculature, 2015, 9, 100-108.	1.1	15
88	Further insights into blood pressure induced premature beats: Transient depolarizations are associated with fast myocardial deformation upon pressure decline. Heart Rhythm, 2015, 12, 2305-2315.	0.7	8
89	Sildenafil Improves Exercise Hemodynamics in Fontan Patients. Circulation: Cardiovascular Imaging, 2014, 7, 265-273.	2.6	125
90	Three-dimensional rotational angiography fused with multimodal imaging modalities for targeted endomyocardial injections in the ischaemic heart. European Heart Journal Cardiovascular Imaging, 2014, 15, 900-907.	1.2	10

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91	Right Ventricular Fatigue Developing during Endurance Exercise. Medicine and Science in Sports and Exercise, 2014, 46, 1717-1726.	0.4	72
92	Imaging Hemodynamics. JACC: Cardiovascular Imaging, 2014, 7, 927-929.	5.3	1
93	Interaction between respiration and right versus left ventricular volumes at rest and during exercise: a real-time cardiac magnetic resonance study. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 306, H816-H824.	3.2	64
94	Reproduction of Continuous Flow Left Ventricular Assist Device Experimental Data by Means of a Hybrid Cardiovascular Model With Baroreflex Control. Artificial Organs, 2014, 38, 456-468.	1.9	30
95	Real-time 3D interactive segmentation of echocardiographic data through user-based deformation of B-spline explicit active surfaces. Computerized Medical Imaging and Graphics, 2014, 38, 57-67.	5.8	17
96	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. Journal of the American Society of Echocardiography, 2014, 27, 376-384.	2.8	54
97	Consistent Regional Heterogeneity of Passive Diastolic Stretch and Systolic Deformation in the Healthy Heart: Age-Related Changes in Left Ventricle Contractility. Ultrasound in Medicine and Biology, 2014, 40, 37-44.	1.5	5
98	Long Term Partial Right Ventricular Support Induces Reverse Remodelling in the Chronic Pressure Overloaded Right Ventricle. Journal of Heart and Lung Transplantation, 2014, 33, S148.	0.6	0
99	Altered CamkII and Ros Microdomains Favor Sparks in Orphaned RyR After Myocardial Infarction. Biophysical Journal, 2014, 106, 322a.	0.5	2
100	Validation of anatomy-enhanced cardiac FDG-PET imaging: An ex vivo sheep study. , 2014, , .		0
101	Abstract 16599: Impaired Right Ventricular Contractile Reserve During Exercise in Endurance Athletes With Right Ventricular Arrhythmias. Circulation, 2014, 130, .	1.6	0
102	Preclinical evaluation of carbon-11 and fluorine-18 sulfonamide derivatives for in vivo radiolabeling of erythrocytes. EJNMMI Research, 2013, 3, 4.	2.5	7
103	Fast Fully Automatic Segmentation of the Myocardium in 2D Cine MR Images. Lecture Notes in Computer Science, 2013, , 71-79.	1.3	5
104	2-D Strain Assessment in the Mouse Through Spatial Compounding of Myocardial Velocity Data: InÂVivo Feasibility. Ultrasound in Medicine and Biology, 2013, 39, 1848-1860.	1.5	2
105	Elastic Image Registration to Quantify 3-D Regional Myocardial Deformation from Volumetric Ultrasound: Experimental Validation in an Animal Model. Ultrasound in Medicine and Biology, 2013, 39, 1688-1697.	1.5	30
106	Fusion of 3D echo and cardiac magnetic resonance volumes during live scanning. , 2013, , .		5
107	Elastic Image Registration Versus Speckle Tracking for 2-D Myocardial Motion Estimation: A Direct Comparison In Vivo. IEEE Transactions on Medical Imaging, 2013, 32, 449-459.	8.9	55
108	Partial mechanical circulatory support in an ovine model of post-infarction remodeling. Journal of Heart and Lung Transplantation, 2013, 32, 815-822.	0.6	9

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109	The Slope of the Segmental Stretch-Strain Relationship as a Noninvasive Index of LV Inotropy. JACC: Cardiovascular Imaging, 2013, 6, 419-428.	5.3	14
110	Determining optimal noninvasive parameters for the prediction of left ventricular remodeling in chronic ischemic patients. Scandinavian Cardiovascular Journal, 2013, 47, 329-334.	1.2	22
111	Placental growth factor increases regional myocardial blood flow and contractile function in chronic myocardial ischemia. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 304, H885-H894.	3.2	10
112	Response to Letter Regarding Article, â€œCardiac Magnetic Resonance Imaging: A New Gold Standard for Ventricular Volume Quantification During High-Intensity Exerciseâ€• Circulation: Cardiovascular Imaging, 2013, 6, e20.	2.6	3
113	Three-Dimensional Cardiac Motion Estimation Based on Non-rigid Image Registration Using a Novel Transformation Model Adapted to the Heart. Lecture Notes in Computer Science, 2013, , 142-150.	1.3	12
114	Infarct Segmentation Challenge on Delayed Enhancement MRI of the Left Ventricle. Lecture Notes in Computer Science, 2013, , 97-104.	1.3	2
115	Cardiac MRI. Circulation: Cardiovascular Imaging, 2013, 6, 329-338.	2.6	210
116	Can Body Surface Microvolt Tâ€Wave Alternans Distinguish Concordant and Discordant Intracardiac Alternans?. PACE - Pacing and Clinical Electrophysiology, 2013, 36, 1007-1016.	1.2	6
117	An automated pipeline for regional cardiac strain estimation from volumetric ultrasound data. , 2013, , .		1
118	Registration between respiratory-gated PET/CT and high-resolution CT with XCAT simulations: Evaluation and optimization for subsequent PVC. , 2013, , .		1
119	A new approach for prospectively gated cardiac rotational angiography. , 2013, , .		5
120	Influence of the Grid Topology of Free-Form Deformation Models on the Performance of 3D Strain Estimation in Echocardiography. Lecture Notes in Computer Science, 2013, , 308-315.	1.3	5
121	Cardiac Motion and Deformation Estimation from Tagged MRI Sequences Using a Temporal Coherent Image Registration Framework. Lecture Notes in Computer Science, 2013, , 316-324.	1.3	11
122	Relationship between Abdominal Pressure, Pulmonary Compliance, and Cardiac Preload in a Porcine Model. Critical Care Research and Practice, 2012, 2012, 1-6.	1.1	35
123	Three-dimensional myocardial strain estimation from volumetric ultrasound data using a novel transformation model adapted to the heart. , 2012, , .		1
124	Fusion of 3D echocardiographic and cardiac magnetic resonance volumes. , 2012, , .		3
125	An integrated solution for semi-automatic segmentation of volumetric ultrasound data based on B-spline explicit active surfaces. , 2012, , .		0
126	How to optimize intracardiac blood flow tracking by echocardiographic particle image velocimetry? Exploring the influence of data acquisition using computer-generated data sets. European Heart Journal Cardiovascular Imaging, 2012, 13, 490-499.	1.2	37

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127	The Use of Cardiac Magnetic Resonance Imaging in the Diagnostic Workup and Treatment of Atrial Fibrillation. Cardiology Research and Practice, 2012, 2012, 1-6.	1.1	4
128	2D myocardial strain assessment in the mouse: A comparison between a synthetic lateral phase approach and block-matching using computer simulation. Ultrasonics, 2012, 52, 936-942.	3.9	2
129	Motion and deformation estimation of cardiac ultrasound sequences using an anatomical B-spline transformation model. , 2012, , .		4
130	199 Reverse Remodelling with the Use of the CirculiteÂ® SynergyÂ® Circulatory Assist System. Journal of Heart and Lung Transplantation, 2012, 31, S74-S75.	0.6	1
131	Histological correlate of a cardiac magnetic resonance imaged microvascular obstruction in a porcine model of ischemiaâ€“reperfusion. Cardiovascular Pathology, 2012, 21, 129-131.	1.6	33
132	Geometric Assessment of Asymmetric Septal Hypertrophic Cardiomyopathy by CMR. JACC: Cardiovascular Imaging, 2012, 5, 702-711.	5.3	41
133	Comparison of a new methodology for the assessment of 3D myocardial strain from volumetric ultrasound with 2D speckle tracking. International Journal of Cardiovascular Imaging, 2012, 28, 1049-1060.	1.5	26
134	Left-Ventricular Function Quantitative Parameters and Their Relationship to Acute Loading Variation: From Physiology to Clinical Practice. Current Cardiovascular Imaging Reports, 2012, 5, 83-91.	0.6	0
135	Regional cardiac motion and strain estimation in three-dimensional echocardiography: a validation study in thick-walled univentricular phantoms. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 668-682.	3.0	47
136	Multi-modal cardiac image fusion and visualization on the GPU. , 2011, , .		3
137	Performance of elastic image registration against speckle tracking for 2D cardiac motion and strain estimation. , 2011, , .		1
138	Microvolt T-wave alternans and beat-to-beat variability of repolarization during early postischemic remodeling in a pig heart. Heart Rhythm, 2011, 8, 1050-1057.	0.7	14
139	Ultrasound-based radial and longitudinal strain estimation of the carotid artery: a feasibility study. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 2244-2251.	3.0	57
140	Thoracic epidural anaesthesia disrupts the protective mechanism of homeometric autoregulation during right ventricular pressure overload by cardiac sympathetic blockade: a randomised controlled animal study. European Journal of Anaesthesiology, 2011, 28, 535-543.	1.7	16
141	Left ventricular 2D flow pattern estimation by combining speckle tracking with Navier-Stokes-based regularization in an iterative way. , 2011, , .		4
142	Three-dimensional myocardial strain estimation from volumetric ultrasound: Experimental validation in an animal model. , 2011, , .		3
143	Non-invasive characterization of the area-at-risk using magnetic resonance imaging in chronic ischaemia. Cardiovascular Research, 2011, 89, 166-174.	3.8	16
144	Left-ventricular shape determines intramyocardial mechanical heterogeneity. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 301, H2351-H2361.	3.2	29

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145	Left-Ventricular Shape Determines Intramyocardial Stroke Work Distribution. Lecture Notes in Computer Science, 2011, , 401-408.	1.3	0
146	3D motion and strain estimation of the heart: initial clinical findings. Proceedings of SPIE, 2010, , .	0.8	2
147	Closed-chest animal model of chronic coronary artery stenosis. Assessment with magnetic resonance imaging. International Journal of Cardiovascular Imaging, 2010, 26, 299-308.	1.5	10
148	Influence of left-ventricular shape on passive filling properties and end-diastolic fiber stress and strain. Journal of Biomechanics, 2010, 43, 1745-1753.	2.1	33
149	Geometric Regularization for 2-D Myocardial Strain Quantification in Mice: An In-Silico Study. Ultrasound in Medicine and Biology, 2010, 36, 1157-1168.	1.5	11
150	Deformation imaging describes right ventricular function better than longitudinal displacement of the tricuspid ring. Heart, 2010, 96, 281-288.	2.9	186
151	A novel measure to express tracking quality in ultrasound block matching. , 2010, , .		0
152	Three-dimensional cardiac motion and strain estimation: A validation study in thick-walled univentricular phantoms. , 2010, , .		6
153	Differential effects of lumbar and thoracic epidural anaesthesia on the haemodynamic response to acute right ventricular pressure overload. British Journal of Anaesthesia, 2010, 104, 143-149.	3.4	22
154	Distribution of active fiber stress at the beginning of ejection depends on left-ventricular shape. , 2010, 2010, 2638-41.		1
155	The influence of pulmonary regurgitation on regional right ventricular function in children after surgical repair of tetralogy of Fallot. European Journal of Echocardiography, 2010, 11, 341-345.	2.3	61
156	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.	2.8	104
157	Partial Mechanical Support in Ovine Postinfarction Chronic Heart Failure: Effect on Remodelling. Journal of Cardiac Failure, 2010, 16, S48.	1.7	0
158	Left ventricular 2D flow pattern estimation of the heart by combining speckle tracking with Navier-Stokes based regularization. , 2010, , .		1
159	A comparison between methods for automatic quantification of global left ventricular function. , 2009, , .		3
160	A simulation setup to optimize particle flow velocimetry. , 2009, , .		2
161	The influence of left-ventricular shape on end-diastolic fiber stress and strain. , 2009, 2009, 2887-90.		1
162	Tangential sound field oscillations for 2D motion estimation in echocardiography. , 2009, , .		12

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163	Assessment of regional myocardial function using 3D cardiac strain estimation: comparison against conventional echocardiographic assessment. , 2009, , .		0
164	An in-vivo study on the difference between principal and cardiac strains. , 2009, , .		3
165	Echocardiographic assessment of left ventricular untwist rate: comparison of tissue Doppler and speckle tracking methodologies. European Journal of Echocardiography, 2009, 10, 683-690.	2.3	10
166	In vitro, in vivo and numerical assessment of the working principle of the truCCOMSâ„¢ continuous cardiac output catheter system. Medical Engineering and Physics, 2009, 31, 1299-1306.	1.7	1
167	A fast convolution-based methodology to simulate 2-Dd/3-D cardiac ultrasound images. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 404-409.	3.0	117
168	Myocardial deformation abnormalities in patients with aortic regurgitation: a strain rate imaging study. European Journal of Echocardiography, 2009, 10, 112-119.	2.3	70
169	Ultrasound-based 2D strain estimation of the carotid artery: an in-silico feasibility study. , 2009, , .		7
170	Pathophysiology of Renal Hemodynamics and Renal Cortical Microcirculation in a Porcine Model of Elevated Intra-abdominal Pressure. Journal of Trauma, 2009, 66, 713-719.	2.3	56
171	Infective endocarditis in the older adult: an emerging entity in need of a specific approach. Aging Health, 2009, 5, 185-191.	0.3	0
172	Toward understanding response to cardiac resynchronization therapy: left ventricular dyssynchrony is only one of multiple mechanisms. European Heart Journal, 2009, 30, 940-949.	2.2	211
173	Choice of coordinate system for left ventricular FE-mesh generation. IFMBE Proceedings, 2009, , 307-310.	0.3	1
174	Geometric regularization improves 2D myocardial motion estimates in the mouse: an in-silico study. IFMBE Proceedings, 2009, , 555-558.	0.3	0
175	A Convolution-based Methodology to Simulate Cardiac Ultrasound Data Sets: Integration of Realistic Beam Profiles. IFMBE Proceedings, 2009, , 2520-2523.	0.3	1
176	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. International Journal of Cardiovascular Imaging, 2008, 24, 365-376.	1.5	11
177	Methicillin-resistant versus methicillin-sensitive Staphylococcus aureus infective endocarditis. European Journal of Clinical Microbiology and Infectious Diseases, 2008, 27, 445-450.	2.9	48
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