

# Brecht Heyde

## List of Publications by Year in descending order

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Version: 2024-02-01

40  
papers

927  
citations

516681

16  
h-index

580810

25  
g-index

41  
all docs

41  
docs citations

41  
times ranked

1136  
citing authors

#	ARTICLE	IF	CITATIONS
1	Current State of Three-Dimensional Myocardial Strain Estimation Using Echocardiography. Journal of the American Society of Echocardiography, 2013, 26, 15-28.	2.8	148
2	Fast automatic myocardial segmentation in 4D cine CMR datasets. Medical Image Analysis, 2014, 18, 1115-1131.	11.6	126
3	Cardiovascular magnetic resonance myocardial feature tracking using a non-rigid, elastic image registration algorithm: assessment of variability in a real-life clinical setting. Journal of Cardiovascular Magnetic Resonance, 2016, 19, 24.	3.3	71
4	Fast and Fully Automatic 3-D Echocardiographic Segmentation Using B-Spline Explicit Active Surfaces: Feasibility Study and Validation in a Clinical Setting. Ultrasound in Medicine and Biology, 2013, 39, 89-101.	1.5	58
5	Ultrasound speckle tracking for radial, longitudinal and circumferential strain estimation of the carotid artery – An in vitro validation via sonomicrometry using clinical and high-frequency ultrasound. Ultrasonics, 2015, 56, 399-408.	3.9	56
6	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
7	3D Strain Assessment in Ultrasound (Straus): A Synthetic Comparison of Five Tracking Methodologies. IEEE Transactions on Medical Imaging, 2013, 32, 1632-1646.	8.9	54
8	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
9	Detailed Evaluation of Five 3D Speckle Tracking Algorithms Using Synthetic Echocardiographic Recordings. IEEE Transactions on Medical Imaging, 2016, 35, 1915-1926.	8.9	40
10	Ultrasound Speckle Tracking Strain Estimation of in Vivo Carotid Artery Plaque with in Vitro Sonomicrometry Validation. Ultrasound in Medicine and Biology, 2015, 41, 77-88.	1.5	37
11	Realistic Vendor-Specific Synthetic Ultrasound Data for Quality Assurance of 2-D Speckle Tracking Echocardiography: Simulation Pipeline and Open Access Database. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 411-422.	3.0	33
12	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
13	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
14	A Comparison of the Performance of Different Multiline Transmit Setups for Fast Volumetric Cardiac Ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 2082-2091.	3.0	19
15	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
16	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
17	Semi-automatic outlining of levator hiatus. Ultrasound in Obstetrics and Gynecology, 2016, 48, 98-105.	1.7	16
18	Standardized Delineation of Endocardial Boundaries in Three-Dimensional Left Ventricular Echocardiograms. Journal of the American Society of Echocardiography, 2017, 30, 1059-1069.	2.8	10

#	ARTICLE	IF	CITATIONS
19	2-D Myocardial Deformation Imaging Based on RF-Based Nonrigid Image Registration. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 1037-1047.	3.0	10
20	Generation of ultra-realistic synthetic echocardiographic sequences to facilitate standardization of deformation imaging. , 2015, , .		6
21	In-vivo validation of a new clinical tool to quantify three-dimensional myocardial strain using ultrasound. International Journal of Cardiovascular Imaging, 2016, 32, 1707-1714.	1.5	6
22	Fully automatic left ventricular myocardial strain estimation in 2D short-axis tagged magnetic resonance imaging. Physics in Medicine and Biology, 2017, 62, 6899-6919.	3.0	5
23	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
24	Motion and deformation estimation of cardiac ultrasound sequences using an anatomical B-spline transformation model. , 2012, , .		4
25	RF-based motion estimation using non-rigid image registration techniques: In-silico and in-vivo feasibility. , 2014, , .		4
26	Automatic short axis orientation of the left ventricle in 3D ultrasound recordings. , 2016, , .		4
27	Evaluation of the Transverse Oscillation Technique for Cardiac Phased Array Imaging: A Theoretical Study. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 320-334.	3.0	4
28	Elastic registration vs. block matching for quantification of cardiac function with 3D ultrasound: Initial results of a direct comparison in silico based on a new evaluation pipeline. , 2014, , .		3
29	Fast myocardial strain estimation from 3D ultrasound through elastic image registration with analytic regularization. , 2016, , .		3
30	2D RF-based non-rigid image registration for cardiac motion estimation: Comparison against block matching. , 2016, , .		3
31	heartBEATS: A hybrid energy approach for real-time B-spline explicit active tracking of surfaces. Computerized Medical Imaging and Graphics, 2017, 62, 26-33.	5.8	2
32	Automatic Definition of an Anatomic Field of View for Volumetric Cardiac Motion Estimation at High Temporal Resolution. Applied Sciences (Switzerland), 2017, 7, 752.	2.5	2
33	Estimation of the Spatial Resolution of a 2D Strain Estimator Using Synthetic Cardiac Images. , 2018, , .		2
34	2D myocardial strain in the mouse through spatial compounding: In-vivo feasibility study. , 2011, , .		1
35	Three-dimensional myocardial strain estimation from volumetric ultrasound data using a novel transformation model adapted to the heart. , 2012, , .		1
36	An automated pipeline for regional cardiac strain estimation from volumetric ultrasound data. , 2013, , .		1

#	ARTICLE	IF	CITATIONS
37	Impact of beamforming strategies and regularisation on ultrasound displacement estimation using RF-based image registration. , 2017, , .		0
38	Notice of Removal: RF-NRIR for motion estimation in fast cardiac anatomical imaging. , 2017, , .		0
39	Notice of Removal: A novel strain-based drift compensation algorithm for improved beat-to-beat repeatability of myocardial strain imaging: Preliminary in vivo results. , 2017, , .		0
40	Notice of Removal: Clinical feasibility of a noninvasive method to interrogate myocardial function via strain and acoustic radiation force-derived stiffness. , 2017, , .		0