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List of Publications by Year in Descending Order

370 papers	12,758 citations	60 h-index	104 g-index
493 ext. papers	15,150 ext. citations	4.9 avg, IF	6.04 L-index

#	Paper	IF	Citations
370	Spatiotemporal Distribution of Nanodroplet Vaporization in a Proton Beam Using Real-Time Ultrasound Imaging for Range Verification. *Ultrasound in Medicine and Biology*, **2022**, 48, 149-156	3.5	1
369	Extracting neuronal activity signals from microscopy recordings of contractile tissue using B-spline Explicit Active Surfaces (BEAS) cell tracking. *Scientific Reports*, **2021**, 11, 10937	4.9	1
368	In Vivo Comparison of Multiline Transmission and Diverging Wave Imaging for High-Frame-Rate Speckle-Tracking Echocardiography. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2021**, 68, 1511-1520	3.2	4
367	Myocardial Strain Measured by Epicardial Transducers-Comparison Between Velocity Estimators. *Ultrasound in Medicine and Biology*, **2021**, 47, 1377-1396	3.5	
366	Kidney Segmentation in 3-D Ultrasound Images Using a Fast Phase-Based Approach. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2021**, 68, 1521-1531	3.2	1
365	Non-rigid image registration using a modified fuzzy feature-based inference system for 3D cardiac motion estimation. *Computer Methods and Programs in Biomedicine*, **2021**, 205, 106085	6.9	0
364	A $128times 1$ Phased Array Piezoelectric Micromachined Ultrasound Transducer (pMUT) for Medical Imaging **2021**,		1
363	Improved High Frame Rate Speckle Tracking for Echocardiography. *Lecture Notes in Computer Science*, **2021**, 93-100	0.9	0
362	Concepts and applications of ultrafast cardiac ultrasound imaging. *Echocardiography*, **2021**, 38, 7-15	1.5	0
361	Interactive Segmentation via Deep Learning and B-Spline Explicit Active Surfaces. *Lecture Notes in Computer Science*, **2021**, 315-325	0.9	
360	A Novel 2-D Speckle Tracking Method for High-Frame-Rate Echocardiography. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2020**, 67, 1764-1775	3.2	4
359	Experimental validation of the prestretch-strain relationship as a non-invasive index of left ventricular myocardial contractility. *PLoS ONE*, **2020**, 15, e0228027	3.7	
358	High-Frame-Rate Tri-Plane Echocardiography With Spiral Arrays: From Simulation to Real-Time Implementation. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2020**, 67, 57-69	3.2	9
357	A Comparison of Coherence-Based Beamforming Techniques in High-Frame-Rate Ultrasound Imaging With Multi-Line Transmission. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2020**, 67, 329-340	3.2	16
356	High-Frame-Rate Color Doppler Echocardiography: A Quantitative Comparison of Different Approaches. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2020**, 67, 923-933	3.2	3
355	Automatic C-Plane Detection in Pelvic Floor Transperineal Volumetric Ultrasound. *Lecture Notes in Computer Science*, **2020**, 136-145	0.9	2
354	The Generalized Contrast-to-Noise Ratio: A Formal Definition for Lesion Detectability. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2020**, 67, 745-759	3.2	85

353	Shear Wave Elastography Using High-Frame-Rate Imaging in the Follow-Up of Heart Transplantation Recipients. *JACC: Cardiovascular Imaging*, **2020**, 13, 2304-2313	8.4	5
352	Interplay of cardiac remodelling and myocardial stiffness in hypertensive heart disease: a shear wave imaging study using high-frame rate echocardiography. *European Heart Journal Cardiovascular Imaging*, **2020**, 21, 664-672	4.1	7
351	Assessment of aortic valve tract dynamics using automatic tracking of 3D transesophageal echocardiographic images. *International Journal of Cardiovascular Imaging*, **2019**, 35, 881-895	2.5	4
350	Compressed Ultrasound Signal Reconstruction Using a Low-Rank and Joint-Sparse Representation Model. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2019**, 66, 1232-1245	3.2	
349	Non-invasive myocardial performance mapping using 3D echocardiographic stress-strain loops. *Physics in Medicine and Biology*, **2019**, 64, 115026	3.8	
348	Phase Change Ultrasound Contrast Agents with a Photopolymerized Diacetylene Shell. *Langmuir*, **2019**, 35, 10116-10127	4	15
347	Coded Excitation for Crosstalk Suppression in Multi-line Transmit Beamforming: Simulation Study and Experimental Validation. *Applied Sciences (Switzerland)*, **2019**, 9, 486	2.6	5
346	Semiautomatic Estimation of Device Size for Left Atrial Appendage Occlusion in 3-D TEE Images. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2019**, 66, 922-929	3.2	3
345	Deep Learning for Segmentation Using an Open Large-Scale Dataset in 2D Echocardiography. *IEEE Transactions on Medical Imaging*, **2019**, 38, 2198-2210	11.7	133
344	Physical Principles of Ultrasound and Generation of Images **2019**, 1-15.e1		
343	Understanding Imaging Artifacts **2019**, 64-72.e1		
342	Area of the pressure-strain loop during ejection as non-invasive index of left ventricular performance: a population study. *Cardiovascular Ultrasound*, **2019**, 17, 15	2.4	4
341	Estimating Regional Myocardial Contraction Using Miniature Transducers on the Epicardium. *Ultrasound in Medicine and Biology*, **2019**, 45, 2958-2969	3.5	1
340	Semi-automatic aortic valve tract segmentation in 3D cardiac magnetic resonance images using shape-based B-spline explicit active surfaces **2019**,		1
339	A linear least squares based estimation of spatial variation of the attenuation coefficient from ultrasound backscatter signals **2019**,		2
338	Velocities of Naturally Occurring Myocardial Shear Waves Increase With Age and in Cardiac Amyloidosis. *JACC: Cardiovascular Imaging*, **2019**, 12, 2389-2398	8.4	26
337	3D Convolutional Neural Network for Segmentation of the Urethra in Volumetric Ultrasound of the Pelvic Floor **2019**,		2
336	Clutter Filtering Using a 3D Deep Convolutional Neural Network **2019**,		1

335	Enabling Ultrasound In-Body Communication: FIR Channel Models and QAM Experiments. *IEEE Transactions on Biomedical Circuits and Systems*, **2019**, 13, 135-144	5.1	13
334	Natural Shear Wave Imaging in the Human Heart: Normal Values, Feasibility, and Reproducibility. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2019**, 66, 442-452	3.2	19
333	Ultrasound Imaging From Sparse RF Samples Using System Point Spread Functions. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 316-326	3.2	14
332	2-D Myocardial Deformation Imaging Based on RF-Based Nonrigid Image Registration. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 1037-1047	3.2	8
331	Validation of a Novel Software Tool for Automatic Aortic Annular Sizing in Three-Dimensional Transesophageal Echocardiographic Images. *Journal of the American Society of Echocardiography*, **2018**, 31, 515-525.e5	5.8	9
330	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	3.2	17
329	Multiline Transmit Beamforming Combined With Adaptive Apodization. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 535-545	3.2	15
328	Standardization of left atrial, right ventricular, and right atrial deformation imaging using two-dimensional speckle tracking echocardiography: a consensus document of the EACVI/ASE/Industry Task Force to standardize deformation imaging. *European Heart Journal Cardiovascular Imaging*, **2018**, 19, 591-600	4.1	433
327	Comparison of in vivo vs. ex situ obtained material properties of sheep common carotid artery. *Medical Engineering and Physics*, **2018**, 55, 16-24	2.4	0
326	Statistical shape modeling of the left ventricle: myocardial infarct classification challenge. *IEEE Journal of Biomedical and Health Informatics*, **2018**, 22, 503-515	7.2	35
325	A Framework for the Generation of Realistic Synthetic Cardiac Ultrasound and Magnetic Resonance Imaging Sequences From the Same Virtual Patients. *IEEE Transactions on Medical Imaging*, **2018**, 37, 741-754	11.7	19
324	Temperature dependence of speed of sound and attenuation of porcine left ventricular myocardium. *Ultrasonics*, **2018**, 82, 246-251	3.5	6
323	3D Tendon Strain Estimation Using High-frequency Volumetric Ultrasound Images: A Feasibility Study. *Ultrasonic Imaging*, **2018**, 40, 67-83	1.9	6
322	Doppler-Based Motion Compensation Strategies for 3-D Diverging Wave Compounding and Multiplane-Transmit Beamforming: A Simulation Study. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 1631-1642	3.2	5
321	Segmentation of kidney and renal collecting system on 3D computed tomography images **2018**,		1
320	Diagnosis of Heart Failure With Preserved Ejection Fraction: Machine Learning of Spatiotemporal Variations in Left Ventricular Deformation. *Journal of the American Society of Echocardiography*, **2018**, 31, 1272-1284.e9	5.8	59
319	Automated segmentation of the atrial region and fossa ovalis towards computer-aided planning of inter-atrial wall interventions. *Computer Methods and Programs in Biomedicine*, **2018**, 161, 73-84	6.9	1
318	Automatic segmentation method of pelvic floor levator hiatus in ultrasound using a self-normalizing neural network. *Journal of Medical Imaging*, **2018**, 5, 021206	2.6	11

317	Attenuation estimation by repeatedly solving the forward scattering problem. *Ultrasonics*, **2018**, 84, 201-209	3.5	4
316	Doppler indexes of left ventricular systolic and diastolic function in relation to haemodynamic load components in a general population. *Journal of Hypertension*, **2018**, 36, 867-875	1.9	3
315	Serial assessment of left ventricular morphology and function in a rodent model of ischemic cardiomyopathy. *International Journal of Cardiovascular Imaging*, **2018**, 34, 385-397	2.5	4
314	Modelling of Channels for Intra-Corporal Ultrasound Communication **2018**,		1
313	Machine Learning for Quality Assurance of Myocardial Strain Curves **2018**,		1
312	Orthogonal Frequency Division Multiplexing Combined with Multi Line Transmission for Ultrafast Ultrasound Imaging: Experimental Findings **2018**,		2
311	**2018**,		24
310	Fully Automatic Assessment of Mitral Valve Morphology from 3D Transthoracic Echocardiography **2018**,		4
309	**2018**,		1
308	Evaluation of Coherence-Based Beamforming for B-Mode and Speckle Tracking Echocardiography **2018**,		1
307	Real-Time High-Frame-Rate Cardiac B-Mode and Tissue Doppler Imaging Based on Multiline Transmission and Multiline Acquisition. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 2030-2041	3.2	14
306	Fast Segmentation of the Left Atrial Appendage in 3-D Transesophageal Echocardiographic Images. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 2332-2342	3.2	6
305	A Novel Interventional Guidance Framework for Transseptal Puncture in Left Atrial Interventions. *Lecture Notes in Computer Science*, **2018**, 93-101	0.9	
304	MITT: Medical Image Tracking Toolbox. *IEEE Transactions on Medical Imaging*, **2018**, 37, 2547-2557	11.7	13
303	Cardiac Troponin T Concentrations, Reversible Myocardial Ischemia, and Indices of Left Ventricular Remodeling in Patients with Suspected Stable Angina Pectoris: a DOPPLER-CIP Substudy. *Clinical Chemistry*, **2018**, 64, 1370-1379	5.5	10
302	Automatic 3D aortic annulus sizing by computed tomography in the planning of transcatheter aortic valve implantation. *Journal of Cardiovascular Computed Tomography*, **2017**, 11, 25-32	2.8	16
301	Feasibility of Multiplane-Transmit Beamforming for Real-Time Volumetric Cardiac Imaging: A Simulation Study. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2017**, 64, 648-659	3.2	6
300	Novel Solutions Applied in Transseptal Puncture: A Systematic Review. *Journal of Medical Devices, Transactions of the ASME*, **2017**, 11,	1.3	7

299	Fast left ventricle tracking using localized anatomical affine optical flow. *International Journal for Numerical Methods in Biomedical Engineering*, **2017**, 33, e2871	2.6	15
298	Temperature monitoring by channel data delays: Feasibility based on estimated delays magnitude for cardiac ablation. *Ultrasonics*, **2017**, 77, 32-37	3.5	
297	Extension of the angular spectrum method to model the pressure field of a cylindrically curved array transducer. *Journal of the Acoustical Society of America*, **2017**, 141, EL262	2.2	2
296	Real-time catheter localization and visualization using three-dimensional echocardiography **2017**,		1
295	Longitudinal Changes in LV Structure and Diastolic Function in Relation to Arterial Properties in General Population. *JACC: Cardiovascular Imaging*, **2017**, 10, 1307-1316	8.4	24
294	Machine learning of the spatio-temporal characteristics of echocardiographic deformation curves for infarct classification. *International Journal of Cardiovascular Imaging*, **2017**, 33, 1159-1167	2.5	21
293	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	3.2	13
292	Evaluation of tissue displacement and regional strain in the Achilles tendon using quantitative high-frequency ultrasound. *PLoS ONE*, **2017**, 12, e0181364	3.7	23
291	Development of a patient-specific atrial phantom model for planning and training of inter-atrial interventions. *Medical Physics*, **2017**, 44, 5638-5649	4.4	12
290	Standardized Delineation of Endocardial Boundaries in Three-Dimensional Left Ventricular Echocardiograms. *Journal of the American Society of Echocardiography*, **2017**, 30, 1059-1069	5.8	5
289	A competitive strategy for atrial and aortic tract segmentation based on deformable models. *Medical Image Analysis*, **2017**, 42, 102-116	15.4	11
288	heartBEATS: A hybrid energy approach for real-time B-spline explicit active tracking of surfaces. *Computerized Medical Imaging and Graphics*, **2017**, 62, 26-33	7.6	1
287	The challenges of measuring in vivo knee collateral ligament strains using ultrasound. *Journal of Biomechanics*, **2017**, 61, 258-262	2.9	5
286	Fast and Fully Automatic Left Ventricular Segmentation and Tracking in Echocardiography Using Shape-Based B-Spline Explicit Active Surfaces. *IEEE Transactions on Medical Imaging*, **2017**, 36, 2287-2296	11.7	38
285	Volumetric imaging of fast mechanical waves in the heart using a clinical ultrasound system **2017**,		2
284	Left ventricular function in relation to chronic residential air pollution in a general population. *European Journal of Preventive Cardiology*, **2017**, 24, 1416-1428	3.9	22
283	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*, **2017**, 19, 24	6.9	50
282	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	3.2	4

281	Left atrial volumetric assessment using a novel automated framework for 3D echocardiography: a multi-centre analysis. *European Heart Journal Cardiovascular Imaging*, **2017**, 18, 1008-1015	4.1	5
280	Automatic Definition of an Anatomic Field of View for Volumetric Cardiac Motion Estimation at High Temporal Resolution. *Applied Sciences (Switzerland)*, **2017**, 7, 752	2.6	0
279	Two-dimensional speckle tracking echocardiography: standardization efforts based on synthetic ultrasound data. *European Heart Journal Cardiovascular Imaging*, **2016**, 17, 693-701	4.1	51
278	Additive Prognostic Value of Left Ventricular Systolic Dysfunction in a Population-Based Cohort. *Circulation: Cardiovascular Imaging*, **2016**, 9,	3.9	47
277	Automatic left-atrial segmentation from cardiac 3D ultrasound: a dual-chamber model-based approach **2016**,		1
276	Spatiotemporal registration of multiple three-dimensional echocardiographic recordings for enhanced field of view imaging. *Journal of Medical Imaging*, **2016**, 3, 037001	2.6	2
275	High frame rate 3D tissue velocity imaging using sub-aperture beamforming: A pilot study in vivo **2016**,		2
274	Multi transmit beams for fast cardiac imaging towards clinical routine **2016**,		5
273	COmplex coronary Bifurcation lesions: RAndomized comparison of a strategy using a dedicated self-expanding biolimus-eluting stent versus a culotte strategy using everolimus-eluting stents: primary results of the COBRA trial. *EuroIntervention*, **2016**, 11, 1457-67	3.1	10
272	High variability in strain estimation errors when using a commercial ultrasound speckle tracking algorithm on tendon tissue. *Acta Radiologica*, **2016**, 57, 1223-9	2	6
271	Wide-Angle Tissue Doppler Imaging at High Frame Rate Using Multi-Line Transmit Beamforming: An Experimental Validation In Vivo. *IEEE Transactions on Medical Imaging*, **2016**, 35, 521-8	11.7	25
270	Standardized Evaluation System for Left Ventricular Segmentation Algorithms in 3D Echocardiography. *IEEE Transactions on Medical Imaging*, **2016**, 35, 967-77	11.7	58
269	Anatomical Image Registration Using Volume Conservation to Assess Cardiac Deformation From 3D Ultrasound Recordings. *IEEE Transactions on Medical Imaging*, **2016**, 35, 501-11	11.7	19
268	Integration of Multi-Plane Tissue Doppler and B-Mode Echocardiographic Images for Left Ventricular Motion Estimation. *IEEE Transactions on Medical Imaging*, **2016**, 35, 89-97	11.7	2
267	Multi-centre validation of an automatic algorithm for fast 4D myocardial segmentation in cine CMR datasets. *European Heart Journal Cardiovascular Imaging*, **2016**, 17, 1118-27	4.1	14
266	STACCATO (Assessment of Stent sTrut Apposition and Coverage in Coronary ArTeries with Optical coherence tomography in patients with STEMI, NSTEMI and stable/unstable angina undergoing everolimus vs. biolimus A9-eluting stent implantation): a randomised controlled trial. *EuroIntervention*, **2016**, 11, e1619-26	3.1	17
265	Automatic Detection of Myocardial Infarction Through a Global Shape Feature Based on Local Statistical Modeling. *Lecture Notes in Computer Science*, **2016**, 208-216	0.9	1
264	Fast myocardial strain estimation from 3D ultrasound through elastic image registration with analytic regularization **2016**,		1

263	Dense motion field estimation from myocardial boundary displacements. *International Journal for Numerical Methods in Biomedical Engineering*, **2016**, 32, e02758	2.6	5
262	Automatic short axis orientation of the left ventricle in 3D ultrasound recordings **2016**,		1
261	Semi-automatic outlining of levator hiatus. *Ultrasound in Obstetrics and Gynecology*, **2016**, 48, 98-105	5.8	9
260	Doppler indexes of left ventricular systolic and diastolic function in relation to the arterial stiffness in a general population. *Journal of Hypertension*, **2016**, 34, 762-71	1.9	19
259	Diverging Wave Volumetric Imaging Using Subaperture Beamforming. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2016**, 63, 2114-2124	3.2	27
258	Delay and Standard Deviation Beamforming to Enhance Specular Reflections in Ultrasound Imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2016**, 63, 2057-2068	3.2	21
257	2D RF-based non-rigid image registration for cardiac motion estimation: Comparison against block matching **2016**,		3
256	Handling missing strain (rate) curves using K-nearest neighbor imputation **2016**,		4
255	A spectroscopic study of the chromatic properties of GafChromicEBT3 films. *Medical Physics*, **2016**, 43, 1156-66	4.4	24
254	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	2.5	5
253	3D tendon strain estimation on high-frequency 3D ultrasound images a simulation and phantom study **2016**,		2
252	Aortic Valve Tract Segmentation From 3D-TEE Using Shape-Based B-Spline Explicit Active Surfaces. *IEEE Transactions on Medical Imaging*, **2016**, 35, 2015-2025	11.7	13
251	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	3.2	10
250	Kidney segmentation in 3D CT images using B-Spline Explicit Active Surfaces **2016**,		1
249	Ultrasound Physics **2016**, 1-18		1
248	Fast left ventricle tracking in CMR images using localized anatomical affine optical flow **2015**,		2
247	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	3.5	44
246	Three-dimensional analysis of implanted magnetic-resonance-visible meshes. *International Urogynecology Journal*, **2015**, 26, 1459-65	2	15

245	Strain assessment in the carotid artery wall using ultrasound speckle tracking: validation in a sheep model. *Physics in Medicine and Biology*, **2015**, 60, 1107-23	3.8	15
244	Acoustic output of multi-line transmit beamforming for fast cardiac imaging: a simulation study. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2015**, 62, 1320-30	3.2	11
243	Principal Component Analysis for the Classification of Cardiac Motion Abnormalities Based on Echocardiographic Strain and Strain Rate Imaging. *Lecture Notes in Computer Science*, **2015**, 83-90	0.9	3
242	The influence of frame rate on two-dimensional speckle-tracking strain measurements: a study on silico-simulated models and images recorded in patients. *European Heart Journal Cardiovascular Imaging*, **2015**, 16, 1137-47	4.1	60
241	Definitions for a common standard for 2D speckle tracking echocardiography: consensus document of the EACVI/ASE/Industry Task Force to standardize deformation imaging. *European Heart Journal Cardiovascular Imaging*, **2015**, 16, 1-11	4.1	541
240	2-D left ventricular flow estimation by combining speckle tracking with Navier-Stokes-based regularization: an in silico, in vitro and in vivo study. *Ultrasound in Medicine and Biology*, **2015**, 41, 99-113	3.5	9
239	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	3.5	25
238	**2015**,		2
237	Continuous ultrasound speckle tracking with Gaussian mixtures. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 129-32	0.9	0
236	Association Between Myocardial Mechanics and Ischemic LV Remodeling. *JACC: Cardiovascular Imaging*, **2015**, 8, 1430-1443	8.4	30
235	Towards sub-Nyquist tissue Doppler imaging using non-uniformly spaced stream of pulses **2015**,		2
234	HD-PULSE: High channel Density Programmable ULtrasound System based on consumer Electronics **2015**,		5
233	Generation of ultra-realistic synthetic echocardiographic sequences to facilitate standardization of deformation imaging **2015**,		4
232	Automatic detection of ischemic myocardium by spatio-temporal analysis of echocardiographic strain and strain rate curves **2015**,		2
231	A Pipeline for the Generation of Realistic 3D Synthetic Echocardiographic Sequences: Methodology and Open-Access Database. *IEEE Transactions on Medical Imaging*, **2015**, 34, 1436-1451	11.7	60
230	Definitions for a common standard for 2D speckle tracking echocardiography: consensus document of the EACVI/ASE/Industry Task Force to standardize deformation imaging. *Journal of the American Society of Echocardiography*, **2015**, 28, 183-93	5.8	428
229	Multi-transmit beam forming for fast cardiac imaging--experimental validation and in vivo application. *IEEE Transactions on Medical Imaging*, **2014**, 33, 1205-19	11.7	74
228	2D localization of specular reflections using ultrasound **2014**,		5

227	Fast automatic myocardial segmentation in 4D cine CMR datasets. *Medical Image Analysis*, **2014**, 18, 1115-31	5.4	96
226	Ultrafast cardiac ultrasound imaging: technical principles, applications, and clinical benefits. *JACC: Cardiovascular Imaging*, **2014**, 7, 812-23	8.4	112
225	Automated detection and quantification of clusters of malapposed and uncovered intracoronary stent struts assessed with optical coherence tomography. *International Journal of Cardiovascular Imaging*, **2014**, 30, 839-48	2.5	10
224	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	7.6	14
223	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	3.5	5
222	Improved myocardial motion estimation combining tissue Doppler and B-mode echocardiographic images. *IEEE Transactions on Medical Imaging*, **2014**, 33, 2098-106	11.7	5
221	Speckle tracking echocardiography in fetuses diagnosed with congenital diaphragmatic hernia. *Prenatal Diagnosis*, **2014**, 34, 1262-7	3.2	15
220	Safety of fast cardiac imaging using multiple transmit beams: Experimental verification **2014**,		4
219	Association of digital vascular function with cardiovascular risk factors: a population study. *BMJ Open*, **2014**, 4, e004399	3	12
218	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
217	**2014**,		2
216	Wide-angle tissue Doppler imaging at high frame rate using multi-line transmit beamforming: An in-vivo pilot study **2014**,		1
215	Ultrasound based dosimetry for radiotherapy: In-vitro proof of principle **2014**,		1
214	Generation of ultra-realistic synthetic echocardiographic sequences **2014**,		4
213	Iterative reconstruction of the ultrasound attenuation coefficient from the backscattered radio-frequency signal **2014**,		2
212	**2014**,		3
211	Fast volumetric cardiac ultrasound: A comparison of different multi-line transmit setups by computer simulation **2014**,		2
210	Automatic assessment of stent neointimal coverage by intravascular optical coherence tomography. *European Heart Journal Cardiovascular Imaging*, **2014**, 15, 195-200	4.1	21

209	Whole myocardium tracking in 2D-echocardiography in multiple orientations using a motion constrained level-set. *Medical Image Analysis*, **2014**, 18, 500-14	15.4	11
208	A new analytic expression for fast calculation of the transient near and far field of a rectangular baffled piston. *Ultrasonics*, **2014**, 54, 1071-7	3.5	2
207	Automatic characterization of neointimal tissue by intravascular optical coherence tomography. *Journal of Biomedical Optics*, **2014**, 19, 21104	3.5	21
206	Optical coherence tomography study of healing characteristics of paclitaxel-eluting balloons vs. everolimus-eluting stents for in-stent restenosis: the SEDUCE (Safety and Efficacy of a Drug elUting balloon in Coronary artery rEstenosis) randomised clinical trial. *EuroIntervention*, **2014**, 10, 439-48	3.1	46
205	Fast Left Ventricle Tracking in 3D Echocardiographic Data Using Anatomical Affine Optical Flow. *Lecture Notes in Computer Science*, **2013**, 191-199	0.9	7
204	Fast Fully Automatic Segmentation of the Myocardium in 2D Cine MR Images. *Lecture Notes in Computer Science*, **2013**, 71-79	0.9	4
203	3D strain assessment in ultrasound (Straus): a synthetic comparison of five tracking methodologies. *IEEE Transactions on Medical Imaging*, **2013**, 32, 1632-46	11.7	43
202	2-D strain assessment in the mouse through spatial compounding of myocardial velocity data: in vivo feasibility. *Ultrasound in Medicine and Biology*, **2013**, 39, 1848-60	3.5	2
201	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, 1688-97	3.5	27
200	Simultaneous quantification of myocardial and blood flow velocities based on duplex mode ultrasound imaging. *BioMedical Engineering OnLine*, **2013**, 12, 107	4.1	
199	Three-dimensional echocardiography in the evaluation of global and regional function in patients with recent myocardial infarction: a comparison with magnetic resonance imaging. *Echocardiography*, **2013**, 30, 682-92	1.5	27
198	**2013**,		8
197	Fusion of 3D echo and cardiac magnetic resonance volumes during live scanning **2013**,		4
196	Elastic image registration versus speckle tracking for 2-D myocardial motion estimation: a direct comparison in vivo. *IEEE Transactions on Medical Imaging*, **2013**, 32, 449-59	11.7	42
195	Multi-transmit beam forming for fast cardiac imaging--a simulation study. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2013**, 60, 1719-31	3.2	49
194	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	3.5	45
193	Quantification of left ventricular volume and global function using a fast automated segmentation tool: validation in a clinical setting. *International Journal of Cardiovascular Imaging*, **2013**, 29, 309-16	2.5	12
192	Does rosiglitazone affect adiposity and cardiac function in genetic diabetic mice?. *European Journal of Pharmacology*, **2013**, 700, 23-31	5.3	16

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190	Current state of three-dimensional myocardial strain estimation using echocardiography. *Journal of the American Society of Echocardiography*, **2013**, 26, 15-28	5.8	118
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7	Ultrasonic strain and strain rate imaging for the assessment of regional myocardial function in mice		1
6	A statistical model-based approach for the detection of abnormal cardiac deformation		1
5	SPEQLE (Software package for echocardiographic quantification LEuven) an integrated approach to ultrasound-based cardiac deformation quantification		7
4	Calculation of strain values from strain rate curves: how should this be done?		2
3	Evaluation of transmural myocardial deformation and reflectivity characteristics		7
2	Software package for echocardiographic quantification: Leuven (SPEQLE)		1
1	A new method for two-dimensional myocardial strain estimation by ultrasound: an in-vivo comparison with sonomicrometry		1