Jan D hooge

List of Publications by Citations

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	Regional strain and strain rate measurements by cardiac ultrasound: principles, implementation and limitations. *European Journal of Echocardiography*, **2000**, 1, 154-70		705
369	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
368	Strain and strain rate imaging: a new clinical approach to quantifying regional myocardial function. *Journal of the American Society of Echocardiography*, **2004**, 17, 788-802	5.8	500
367	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
366	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
365	Experimental validation of a new ultrasound method for the simultaneous assessment of radial and longitudinal myocardial deformation independent of insonation angle. *Circulation*, **2005**, 112, 2157-62	16.7	275
364	Can natural strain and strain rate quantify regional myocardial deformation? A study in healthy subjects. *Ultrasound in Medicine and Biology*, **2001**, 27, 1087-97	3.5	222
363	Remodeling of T-tubules and reduced synchrony of Ca2+ release in myocytes from chronically ischemic myocardium. *Circulation Research*, **2008**, 102, 338-46	15.7	187
362	Myocardial elastography--a feasibility study in vivo. *Ultrasound in Medicine and Biology*, **2002**, 28, 475-82	3.5	187
361	Quantification of regional left and right ventricular radial and longitudinal function in healthy children using ultrasound-based strain rate and strain imaging. *Journal of the American Society of Echocardiography*, **2002**, 15, 20-8	5.8	187
360	Left ventricular flow patterns in healthy subjects and patients with prosthetic mitral valves: an in vivo study using echocardiographic particle image velocimetry. *Journal of Thoracic and Cardiovascular Surgery*, **2010**, 139, 1501-10	1.5	164
359	Identification of acutely ischemic myocardium using ultrasonic strain measurements. A clinical study in patients undergoing coronary angioplasty. *Journal of the American College of Cardiology*, **2003**, 41, 810-9	15.1	161
358	Noninvasive quantification of the contractile reserve of stunned myocardium by ultrasonic strain rate and strain. *Circulation*, **2001**, 104, 1059-65	16.7	161
357	Left ventricular strain and strain rate: characterization of the effect of load in human subjects. *European Journal of Echocardiography*, **2010**, 11, 283-9		158
356	Deformation imaging describes right ventricular function better than longitudinal displacement of the tricuspid ring. *Heart*, **2010**, 96, 281-8	5.1	153
355	Myocardial dysfunction late after low-dose anthracycline treatment in asymptomatic pediatric patients. *Journal of the American Society of Echocardiography*, **2007**, 20, 1351-8	5.8	153
354	Absence of SPARC results in increased cardiac rupture and dysfunction after acute myocardial infarction. *Journal of Experimental Medicine*, **2009**, 206, 113-23	16.6	152

353	Left ventricular strain and strain rate in a general population. *European Heart Journal*, **2008**, 29, 2014-23	9.5	151
352	Defining the transmurality of a chronic myocardial infarction by ultrasonic strain-rate imaging: implications for identifying intramural viability: an experimental study. *Circulation*, **2003**, 107, 883-8	16.7	147
351	Strain rate imaging detects early cardiac effects of pegylated liposomal Doxorubicin as adjuvant therapy in elderly patients with breast cancer. *Journal of the American Society of Echocardiography*, **2008**, 21, 1283-9	5.8	146
350	Two-dimensional ultrasonic strain rate measurement of the human heart in vivo. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2002**, 49, 281-6	3.2	143
349	Feasibility of strain and strain rate imaging for the assessment of regional left atrial deformation: a study in normal subjects. *European Journal of Echocardiography*, **2006**, 7, 199-208		142
348	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
347	Ultrastructural and functional remodeling of the coupling between Ca2+ influx and sarcoplasmic reticulum Ca2+ release in right atrial myocytes from experimental persistent atrial fibrillation. *Circulation Research*, **2009**, 105, 876-85	15.7	130
346	Three-dimensional cardiac strain estimation using spatio-temporal elastic registration of ultrasound images: a feasibility study. *IEEE Transactions on Medical Imaging*, **2008**, 27, 1580-91	11.7	126
345	Can strain rate and strain quantify changes in regional systolic function during dobutamine infusion, B-blockade, and atrial pacing--implications for quantitative stress echocardiography. *Journal of the American Society of Echocardiography*, **2002**, 15, 416-24	5.8	120
344	Quantification of the spectrum of changes in regional myocardial function during acute ischemia in closed chest pigs: an ultrasonic strain rate and strain study. *Journal of the American Society of Echocardiography*, **2001**, 14, 874-84	5.8	120
343	Current state of three-dimensional myocardial strain estimation using echocardiography. *Journal of the American Society of Echocardiography*, **2013**, 26, 15-28	5.8	118
342	Recommendations of the European Association of Echocardiography: how to use echo-Doppler in clinical trials: different modalities for different purposes. *European Journal of Echocardiography*, **2011**, 12, 339-53		118
341	Ultrafast cardiac ultrasound imaging: technical principles, applications, and clinical benefits. *JACC: Cardiovascular Imaging*, **2014**, 7, 812-23	8.4	112
340	Acute cardiac functional and morphological changes after Anthracycline infusions in children. *American Journal of Cardiology*, **2007**, 99, 974-7	3	112
339	Regional right ventricular dysfunction in chronic pulmonary hypertension. *Journal of the American Society of Echocardiography*, **2007**, 20, 1172-80	5.8	106
338	Acute changes in systolic and diastolic events during clinical coronary angioplasty: a comparison of regional velocity, strain rate, and strain measurement. *Journal of the American Society of Echocardiography*, **2002**, 15, 1-12	5.8	105
337	Temporal diffeomorphic free-form deformation: application to motion and strain estimation from 3D echocardiography. *Medical Image Analysis*, **2012**, 16, 427-50	15.4	104
336	Exercise strain rate imaging demonstrates normal right ventricular contractile reserve and clarifies ambiguous resting measures in endurance athletes. *Journal of the American Society of Echocardiography*, **2012**, 25, 253-262.e1	5.8	103

335	Gene-targeting of Phd2 improves tumor response to chemotherapy and prevents side-toxicity. *Cancer Cell*, **2012**, 22, 263-77	24.3	101
334	The relative value of strain and strain rate for defining intrinsic myocardial function. *American Journal of Physiology - Heart and Circulatory Physiology*, **2012**, 302, H188-95	5.2	100
333	Echocardiographic strain and strain-rate imaging: a new tool to study regional myocardial function. *IEEE Transactions on Medical Imaging*, **2002**, 21, 1022-30	11.7	97
332	Fast automatic myocardial segmentation in 4D cine CMR datasets. *Medical Image Analysis*, **2014**, 18, 1115-31	7.4	96
331	Early regional myocardial dysfunction in young patients with Duchenne muscular dystrophy. *Journal of the American Society of Echocardiography*, **2008**, 21, 1049-54	5.8	96
330	Automated tissue characterization of in vivo atherosclerotic plaques by intravascular optical coherence tomography images. *Biomedical Optics Express*, **2013**, 4, 1014-30	3.5	95
329	A fast convolution-based methodology to simulate 2-D/3-D cardiac ultrasound images. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2009**, 56, 404-9	3.2	87
328	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
327	Detection and monitoring of cardiotoxicity-what does modern cardiology offer?. *Supportive Care in Cancer*, **2008**, 16, 437-45	3.9	82
326	Absence of thrombospondin-2 causes age-related dilated cardiomyopathy. *Circulation*, **2009**, 120, 1585-97	16.7	81
325	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*, **2009**, 30, 662-70	9.5	81
324	B-spline explicit active surfaces: an efficient framework for real-time 3-D region-based segmentation. *IEEE Transactions on Image Processing*, **2012**, 21, 241-51	8.7	80
323	Automatic segmentation of in-vivo intra-coronary optical coherence tomography images to assess stent strut apposition and coverage. *International Journal of Cardiovascular Imaging*, **2012**, 28, 229-41	2.5	80
322	Can changes in systolic longitudinal deformation quantify regional myocardial function after an acute infarction? An ultrasonic strain rate and strain study. *Journal of the American Society of Echocardiography*, **2002**, 15, 723-30	5.8	77
321	Long-term blinded placebo-controlled study of SNT-MC17/idebenone in the dystrophin deficient mdx mouse: cardiac protection and improved exercise performance. *European Heart Journal*, **2009**, 30, 116-24	9.5	75
320	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
319	Prospective assessment of fetal cardiac function with speckle tracking in healthy fetuses and recipient fetuses of twin-to-twin transfusion syndrome. *Journal of the American Society of Echocardiography*, **2010**, 23, 301-8	5.8	74
318	Abnormal postsystolic thickening in acutely ischemic myocardium during coronary angioplasty: a velocity, strain, and strain rate doppler myocardial imaging study. *Journal of the American Society of Echocardiography*, **1999**, 12, 994-6	5.8	73

317	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	9.5	68
316	Experimental assessment of a new research tool for the estimation of two-dimensional myocardial strain. *Ultrasound in Medicine and Biology*, **2006**, 32, 1509-13	3.5	67
315	Comparison of time-domain displacement estimators for two-dimensional RF tracking. *Ultrasound in Medicine and Biology*, **2003**, 29, 1177-86	3.5	66
314	Doppler myocardial imaging. A new tool to assess regional inhomogeneity in cardiac function. *Basic Research in Cardiology*, **2001**, 96, 595-605	11.8	66
313	The potential clinical role of ultrasonic strain and strain rate imaging in diagnosing acute rejection after heart transplantation. *European Journal of Echocardiography*, **2007**, 8, 213-21		62
312	RF-based two-dimensional cardiac strain estimation: a validation study in a tissue-mimicking phantom. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2004**, 51, 1537-46	3.2	61
311	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
310	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
309	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
308	Standardized Evaluation System for Left Ventricular Segmentation Algorithms in 3D Echocardiography. *IEEE Transactions on Medical Imaging*, **2016**, 35, 967-77	11.7	58
307	Regional myocardial deformation in children with hypertrophic cardiomyopathy: morphological and clinical correlations. *European Heart Journal*, **2007**, 28, 2886-94	9.5	56
306	Mechanisms of postsystolic thickening in ischemic myocardium: mathematical modelling and comparison with experimental ischemic substrates. *Ultrasound in Medicine and Biology*, **2007**, 33, 1963-70	3.5	55
305	One-dimensional ultrasonic strain and strain rate imaging: a new approach to the quantitation of regional myocardial function in patients with aortic stenosis. *Ultrasound in Medicine and Biology*, **2003**, 29, 1085-92	3.5	53
304	Two-dimensional speckle tracking echocardiography: standardization efforts based on synthetic ultrasound data. *European Heart Journal Cardiovascular Imaging*, **2016**, 17, 693-701	4.1	51
303	Doppler tissue velocity, strain, and strain rate imaging with transesophageal echocardiography in the operating room: a feasibility study. *Journal of the American Society of Echocardiography*, **2002**, 15, 768-76	5.8	51
302	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
301	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
300	Detection of regional myocardial dysfunction in patients with acute myocardial infarction using velocity vector imaging. *Journal of the American Society of Echocardiography*, **2008**, 21, 879-86	5.8	49

299	Quantification of regional right and left ventricular function by ultrasonic strain rate and strain indexes in Friedreich's ataxia. *American Journal of Cardiology*, **2003**, 91, 622-6	3	48
298	Additive Prognostic Value of Left Ventricular Systolic Dysfunction in a Population-Based Cohort. *Circulation: Cardiovascular Imaging*, **2016**, 9,	3.9	47
297	Long-term miR-669a therapy alleviates chronic dilated cardiomyopathy in dystrophic mice. *Journal of the American Heart Association*, **2013**, 2, e000284	6	47
296	Detection of the whole myocardium in 2D-echocardiography for multiple orientations using a geometrically constrained level-set. *Medical Image Analysis*, **2012**, 16, 386-401	15.4	46
295	Thrombospondin-2 prevents cardiac injury and dysfunction in viral myocarditis through the activation of regulatory T-cells. *Cardiovascular Research*, **2012**, 94, 115-24	9.9	46
294	Comparison of conventional parallel beamforming with plane wave and diverging wave imaging for cardiac applications: a simulation study. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2012**, 59, 1654-63	3.2	46
293	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?. *Journal of the American Society of Echocardiography*, **2003**, 16, 299-308	5.8	46
292	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
291	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
290	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
289	New aspects of the ventricular septum and its function: an echocardiographic study. *Heart*, **2005**, 91, 1343-8	5.1	44
288	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
287	Quantifying myocardial deformation throughout the cardiac cycle: a comparison of ultrasound strain rate, grey-scale M-mode and magnetic resonance imaging. *Ultrasound in Medicine and Biology* , **2004**, 30, 591-8	3.5	43
286	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
285	A level set framework with a shape and motion prior for segmentation and region tracking in echocardiography. *Medical Image Analysis*, **2006**, 10, 162-77	15.4	42
284	Ultrasound-based radial and longitudinal strain estimation of the carotid artery: a feasibility study. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2011**, 58, 2244-51	3.2	40
283	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, 668-82	3.2	39
282	Towards ultrasound cardiac image segmentation based on the radiofrequency signal. *Medical Image Analysis*, **2003**, 7, 353-67	15.4	39

281	Changes in systolic and postsystolic wall thickening during acute coronary occlusion and reperfusion in closed-chest pigs: Implications for the assessment of regional myocardial function. *Journal of the American Society of Echocardiography*, **2001**, 14, 691-7	5.8	39
280	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
279	Comparison of real-time tri-plane and conventional 2D dobutamine stress echocardiography for the assessment of coronary artery disease. *European Heart Journal*, **2006**, 27, 1719-24	9.5	36
278	The evaluation of pulmonary hypertension using right ventricular myocardial isovolumic relaxation time. *Journal of the American Society of Echocardiography*, **2005**, 18, 1113-20	5.8	36
277	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
276	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, 490-9	4.1	35
275	Absence of thrombospondin-2 increases cardiomyocyte damage and matrix disruption in doxorubicin-induced cardiomyopathy. *Journal of Molecular and Cellular Cardiology*, **2011**, 51, 318-28	5.8	34
274	Late post-repair ventricular function in patients with origin of the left main coronary artery from the pulmonary trunk. *American Journal of Cardiology*, **2004**, 93, 506-8	3	33
273	A dual-chamber, thick-walled cardiac phantom for use in cardiac motion and deformation imaging by ultrasound. *Ultrasound in Medicine and Biology*, **2010**, 36, 1145-56	3.5	32
272	Association Between Myocardial Mechanics and Ischemic LV Remodeling. *JACC: Cardiovascular Imaging*, **2015**, 8, 1430-1443	8.4	30
271	Fully automatic three-dimensional visualization of intravascular optical coherence tomography images: methods and feasibility in vivo. *Biomedical Optics Express*, **2012**, 3, 3291-303	3.5	29
270	Influence of left-ventricular shape on passive filling properties and end-diastolic fiber stress and strain. *Journal of Biomechanics*, **2010**, 43, 1745-53	2.9	29
269	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
268	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
267	Impact of hypertension on ventricular-arterial coupling and regional myocardial work at rest and during isometric exercise. *Journal of the American Society of Echocardiography*, **2012**, 25, 882-90	5.8	27
266	Strain rate imaging after dynamic stress provides objective evidence of persistent regional myocardial dysfunction in ischaemic myocardium: regional stunning identified?. *Heart*, **2005**, 91, 152-60	5.1	27
265	High frame rate myocardial integrated backscatter. Does this change our understanding of this acoustic parameter?. *European Journal of Echocardiography*, **2000**, 1, 32-41		27
264	Tissue Doppler Echocardiography: Future Developments. *Echocardiography*, **1999**, 16, 509-520	1.5	27

263	Diverging Wave Volumetric Imaging Using Subaperture Beamforming. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2016**, 63, 2114-2124	3.2	27
262	Doppler myocardial imaging in the diagnosis of early systolic left ventricular dysfunction in diabetic rats. *European Journal of Echocardiography*, **2008**, 9, 326-33		26
261	Velocities of Naturally Occurring Myocardial Shear Waves Increase With Age and in Cardiac Amyloidosis. *JACC: Cardiovascular Imaging*, **2019**, 12, 2389-2398	8.4	26
260	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
259	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
258	Assessment of strain and strain rate by two-dimensional speckle tracking in mice: comparison with tissue Doppler echocardiography and conductance catheter measurements. *European Heart Journal Cardiovascular Imaging*, **2013**, 14, 765-73	4.1	25
257	Doppler myocardial imaging in adult male rats: reference values and reproducibility of velocity and deformation parameters. *European Journal of Echocardiography*, **2006**, 7, 411-7		25
256	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
255	Ultrasonic strain/strain rate imaging--a new clinical tool to evaluate the transplanted heart. *European Journal of Echocardiography*, **2005**, 6, 186-95		24
254	Quantitation of left-ventricular asynergy by cardiac ultrasound. *American Journal of Cardiology*, **2000**, 86, 4G-9G	3	24
253	A spectroscopic study of the chromatic properties of GafChromicEBT3 films. *Medical Physics*, **2016**, 43, 1156-66	4.4	24
252	**2018**,		24
251	Evaluation of tissue displacement and regional strain in the Achilles tendon using quantitative high-frequency ultrasound. *PLoS ONE*, **2017**, 12, e0181364	3.7	23
250	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, 1049-60	2.5	23
249	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
248	Increased cardiac myocyte PDE5 levels in human and murine pressure overload hypertrophy contribute to adverse LV remodeling. *PLoS ONE*, **2013**, 8, e58841	3.7	22
247	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
246	Automatic assessment of stent neointimal coverage by intravascular optical coherence tomography. *European Heart Journal Cardiovascular Imaging*, **2014**, 15, 195-200	4.1	21

245	Automatic characterization of neointimal tissue by intravascular optical coherence tomography. *Journal of Biomedical Optics*, **2014**, 19, 21104	3.5	21
244	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
243	Statistics of the radio-frequency signal based on K distribution with application to echocardiography. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2006**, 53, 1689-94	3.2	20
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241	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
240	The calculation of the transient near and far field of a baffled piston using low sampling frequencies. *Journal of the Acoustical Society of America*, **1997**, 102, 78-86	2.2	19
239	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
238	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
237	Automatic three-dimensional registration of intravascular optical coherence tomography images. *Journal of Biomedical Optics*, **2012**, 17, 026005	3.5	18
236	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
235	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
234	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
233	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
232	Does rosiglitazone affect adiposity and cardiac function in genetic diabetic mice?. *European Journal of Pharmacology*, **2013**, 700, 23-31	5.3	16
231	Determining optimal noninvasive parameters for the prediction of left ventricular remodeling in chronic ischemic patients. *Scandinavian Cardiovascular Journal*, **2013**, 47, 329-34	2	16
230	Fast myocardial motion and strain estimation in 3D cardiac ultrasound with Sparse Demons **2013**,		16
229	Fast and accurate specimen-specific simulation of trabecular bone elastic modulus using novel beam-shell finite element models. *Journal of Biomechanics*, **2011**, 44, 1566-72	2.9	16
228	Fast left ventricle tracking using localized anatomical affine optical flow. *International Journal for Numerical Methods in Biomedical Engineering*, **2017**, 33, e2871	2.6	15

227	Phase Change Ultrasound Contrast Agents with a Photopolymerized Diacetylene Shell. *Langmuir*, **2019**, 35, 10116-10127	4	15
226	Three-dimensional analysis of implanted magnetic-resonance-visible meshes. *International Urogynecology Journal*, **2015**, 26, 1459-65	2	15
225	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
224	Multiline Transmit Beamforming Combined With Adaptive Apodization. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 535-545	3.2	15
223	Speckle tracking echocardiography in fetuses diagnosed with congenital diaphragmatic hernia. *Prenatal Diagnosis*, **2014**, 34, 1262-7	3.2	15
222	Healing responses after bifurcation stenting with the dedicated TRYTON Side-Branch Stent in combination with XIENCE-V stents: a clinical, angiography, fractional flow reserve, and optical coherence tomography study: the PYTON (Prospective evaluation of the TRYTON Side-Branch Stent with an additional XIENCE-V everolimus-eluting stent in coronary bifurcation lesions)	2.7	15
221	Myocardial deformation abnormalities in pediatric hypertrophic cardiomyopathy: are all etiologies identical?. *European Journal of Echocardiography*, **2008**, 9, 784-90		15
220	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
219	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
218	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
217	Temporal diffeomorphic free-form deformation for strain quantification in 3D-US images. *Lecture Notes in Computer Science*, **2010**, 13, 1-8	0.9	14
216	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
215	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
214	The correlation between the SOS in trabecular bone and stiffness and density studied by finite-element analysis. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2008**, 55, 1234-42	3.2	13
213	Different deformation patterns in intracardiac tumors. *European Journal of Echocardiography*, **2005**, 6, 461-4		13
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108	A comparison between methods for automatic quantification of global left ventricular function **2009**,		3
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106	Fusion of 3D echocardiographic and cardiac magnetic resonance volumes **2012**,		3
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29	Fast myocardial strain estimation from 3D ultrasound through elastic image registration with analytic regularization **2016**,		1
28	Automatic short axis orientation of the left ventricle in 3D ultrasound recordings **2016**,		1
27	Kidney segmentation in 3D CT images using B-Spline Explicit Active Surfaces **2016**,		1
26	Ultrasound Physics **2016**, 1-18		1
25	Clutter Filtering Using a 3D Deep Convolutional Neural Network **2019**,		1
24	Modelling of Channels for Intra-Corporal Ultrasound Communication **2018**,		1
23	Machine Learning for Quality Assurance of Myocardial Strain Curves **2018**,		1
22	**2018**,		1
21	Evaluation of Coherence-Based Beamforming for B-Mode and Speckle Tracking Echocardiography **2018**,		1
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