Lasse Lovstakken

List of Publications by Year
in descending order

69 papers	2,111 citations	331670 21 h-index	243625 44 g-index
69 all docs	69 docs citations	69 times ranked	1752 citing authors

#	Article	IF	Citations
1	3D Myocardial Mechanical Wave Measurements. JACC: Cardiovascular Imaging, 2021, 14, 1495-1505.	5.3	26
2	Retrospective Transmit Beamforming and Coherent Plane-Wave Compounding for Microvascular Doppler Imaging: A Comparison Study. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 1105-1116.	3.0	6
3	Translation of Simultaneous Vessel Wall Motion and Vectorial Blood Flow Imaging in Healthy and Diseased Carotids to the Clinic: A Pilot Study. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 558-569.	3.0	9
4	Myocardial Function Imaging in Echocardiography Using Deep Learning. IEEE Transactions on Medical Imaging, 2021, 40, 1340-1351.	8.9	34
5	Artificial Intelligence for Automatic Measurement of Left Ventricular Strain inÂEchocardiography. JACC: Cardiovascular Imaging, 2021, 14, 1918-1928.	5.3	56
6	Right Ventricular Flow Dynamics in Dilated Right Ventricles: Energy Loss Estimation Based on Blood Speckle Tracking Echocardiographyâ€"A Pilot Study in Children. Ultrasound in Medicine and Biology, 2021, 47, 1514-1527.	1.5	15
7	Better Automatic Interpretation of Cement Evaluation Logs through Feature Engineering. SPE Journal, 2021, 26, 2894-2913.	3.1	11
8	Intraventricular Vector Flow Imaging with Blood Speckle Tracking in Adults: Feasibility, Normal Physiology and Mechanisms in Healthy Volunteers. Ultrasound in Medicine and Biology, 2021, 47, 3501-3513.	1.5	16
9	Real-time temporal coherent left ventricle segmentation using convolutional LSTMs. , 2021, , .		2
10	Proposed Requirements for Cardiovascular Imaging-Related Machine Learning Evaluation (PRIME): A Checklist. JACC: Cardiovascular Imaging, 2020, 13, 2017-2035.	5.3	123
11	Detection of Tissue Fibrosis using Natural Mechanical Wave Velocity Estimation: Feasibility Study. Ultrasound in Medicine and Biology, 2020, 46, 2481-2492.	1.5	9
12	Real-Time Automatic Ejection Fraction and Foreshortening Detection Using Deep Learning. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2595-2604.	3.0	48
13	LU-Net: A Multistage Attention Network to Improve the Robustness of Segmentation of Left Ventricular Structures in 2-D Echocardiography. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2519-2530.	3.0	23
14	Automatic interpretation of cement evaluation logs from cased boreholes using supervised deep neural networks. Journal of Petroleum Science and Engineering, 2020, 195, 107539.	4.2	26
15	Blood Speckle-Tracking Based on Highâ€"Frame Rate Ultrasound Imaging in Pediatric Cardiology. Journal of the American Society of Echocardiography, 2020, 33, 493-503.e5.	2.8	63
16	High-Frame-Rate Color Doppler Echocardiography: A Quantitative Comparison of Different Approaches. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 923-933.	3.0	5
17	Clutter Filter Wave Imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1444-1452.	3.0	15
18	Ventriculoâ€"arterial interaction may be assessed by Oscillatory Power Fraction. Clinical Physiology and Functional Imaging, 2019, 39, 308-314.	1.2	2

#	ARTICLE	IF	CITATIONS
19	Deep Learning for Segmentation Using an Open Large-Scale Dataset in 2D Echocardiography. IEEE Transactions on Medical Imaging, 2019, 38, 2198-2210.	8.9	292
20	Segmentation of apical long axis, four- and two-chamber views using deep neural networks. , 2019, , .		11
21	RU-Net: A refining segmentation network for 2D echocardiography. , 2019, , .		12
22	Real-Time Standard View Classification in Transthoracic Echocardiography Using Convolutional Neural Networks. Ultrasound in Medicine and Biology, 2019, 45, 374-384.	1.5	81
23	Automatic intraoperative estimation of blood flow direction during neurosurgical interventions. International Journal of Computer Assisted Radiology and Surgery, 2018, 13, 693-701.	2.8	2
24	Detection of Cardiac Events in Echocardiography Using 3D Convolutional Recurrent Neural Networks. , 2018, , .		17
25	Spatial and Temporal Adaptive FIR Clutter Filtering. , 2018, , .		4
26	A Fast 4D B-Spline Framework for Model-Based Reconstruction and Regularization in Vector Flow Imaging. , 2018, , .		4
27	Automatic Myocardial Strain Imaging in Echocardiography Using Deep Learning. Lecture Notes in Computer Science, 2018, , 309-316.	1.3	13
28	4-D Intracardiac Ultrasound Vector Flow Imaging–Feasibility and Comparison to Phase-Contrast MRI. IEEE Transactions on Medical Imaging, 2018, 37, 2619-2629.	8.9	60
29	Specular Beamforming. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 1285-1297.	3.0	18
30	Notice of Removal: Real-time assimilation and regularization of ultrasound blood velocity measurements using smoothed particle hydrodynamics. , 2017, , .		0
31	Notice of Removal: In-vivo 3D cardiac vector flow imaging â€" A comparison between ultrasound and phase-contrast MRI. , 2017, , .		0
32	Axial lobes in coherent plane-wave compounding. , 2016, , .		12
33	Combined 2-D vector and tracking Doppler imaging for improved blood velocity quantification. , 2016, , .		1
34	Data adaptive 2-D tracking Doppler. , 2016, , .		2
35	Adaptive Spectral Estimation Methods in Color Flow Imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 1839-1851.	3.0	3
36	Adaptive beamforming based on Snell's law of reflection. , 2016, , .		0

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37	Minimally invasive beat-by-beat monitoring of cardiac power in normal hearts and during acute ventricular dysfunction. Physiological Reports, 2016, 4, e12989.	1.7	3
38	Reconstruction of specular reflectors by iterative image source localization. Journal of the Acoustical Society of America, 2015, 138, 1365-1378.	1.1	4
39	Improved quality of freehand 3-D ultrasound color flow imaging by multi-angle compounding. , 2015, , .		3
40	Needle detection by image source localization. , 2015, , .		1
41	Optimum beamformer strategy for detecting signals in clutter noise. , 2015, , .		2
42	Detection of the Intima-Lumen interface by coherent combination of RF scanlines. , 2015, , .		0
43	Coherent compounding in doppler imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 1634-1643.	3.0	39
44	Blood Flow Imaging in Transesophageal Echocardiography during Atrial Septal Defect Closure: A Comparison with the Current References. Echocardiography, 2015, 32, 34-41.	0.9	1
45	On the accuracy of coherent compounding Doppler imaging. , 2014, , .		2
46	Shunt Flow Evaluation in Congenital Heart Disease Based on Two-Dimensional Speckle Tracking. Ultrasound in Medicine and Biology, 2014, 40, 2379-2391.	1.5	143
47	Combined Vector Velocity and Spectral Doppler Imaging for Improved Imaging of Complex Blood Flow in the Carotid Arteries. Ultrasound in Medicine and Biology, 2014, 40, 1629-1640.	1.5	35
48	Simultaneous quantification of flow and tissue velocities based on multi-angle plane wave imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 727-738.	3.0	115
49	Coherent Plane Wave Compounding for Very High Frame Rate Ultrasonography of Rapidly Moving Targets. IEEE Transactions on Medical Imaging, 2013, 32, 1265-1276.	8.9	185
50	Model-Based Correction of Velocity Measurements in Navigated 3-D Ultrasound Imaging During Neurosurgical Interventions. IEEE Transactions on Medical Imaging, 2013, 32, 1622-1631.	8.9	4
51	Cardiac power integral: a new method for monitoring cardiovascular performance. Physiological Reports, 2013, 1, e00159.	1.7	9
52	The Accuracy of Ultrasound Volume Flow Measurements in the Complex Flow Setting of a Forearm Vascular Access. Journal of Vascular Access, 2013, 14, 281-290.	0.9	20
53	2D Tracking Doppler: A new method to limit spectral broadening in pulsed wave doppler. , 2012, , .		2
54	Improved 3-D reconstruction of vascular flow based on plane wave imaging. , 2012, , .		0

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55	Effect of the degree of LAD stenosis on â€œcompetitive flowâ€•and flow field characteristics in LIMA-to-LAD bypass surgery. Medical and Biological Engineering and Computing, 2012, 50, 839-849.	2.8	22
56	Intrasellar Ultrasound in Transsphenoidal Surgery. Neurosurgery, 2010, 66, 173-186.	1.1	43
57	Two-Dimensional Flow Imaging in the Carotid Bifurcation Using a Combined Speckle Tracking and Phase-Shift Estimator: A Study Based on Ultrasound Simulations and in vivo Analysis. Ultrasound in Medicine and Biology, 2010, 36, 1722-1735.	1.5	19
58	Does a New Ultrasound Flow Modality Improve Visualization of Neonatal Pulmonary Veins?. Echocardiography, 2010, 27, 1113-1119.	0.9	2
59	Eigen-based clutter filter design for ultrasound color flow imaging: a review. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 1096-1111.	3.0	168
60	A simulation environment for validating ultrasonic blood flow and vessel wall imaging based on fluidâ€structure interaction simulations: Ultrasonic assessment of arterial distension and wall shear rate. Medical Physics, 2010, 37, 4318-4330.	3.0	41
61	Impact of competitive flow on wall shear stress in coronary surgery: computational fluid dynamics of a LIMAâ€"LAD model. Cardiovascular Research, 2010, 88, 512-519.	3.8	82
62	Different graft flow patterns due to competitive flow or stenosis in the coronary anastomosis assessed by transit-time flowmetry in a porcine modelâ˜†â˜†â˜†. European Journal of Cardio-thoracic Surgery, 2009, 36, 137-142.	1.4	30
63	Assessment of Numerical Simulation Strategies for Ultrasonic Color Blood Flow Imaging, Based on a Computer and Experimental Model of the Carotid Artery. Annals of Biomedical Engineering, 2009, 37, 2188-2199.	2.5	17
64	Investigation of transmit and receive performance at the fundamental and third harmonic resonance frequency of a medical ultrasound transducer. Ultrasonics, 2009, 49, 601-604.	3.9	6
65	Two-dimensional flow velocity estimation in the carotid bifurcation: a study of crossed-beam vector Doppler and speckle tracking using computational fluid dynamics. , 2009, , .		0
66	Blood Flow Imaging: A New Two-Dimensional Ultrasound Modality for Enhanced Intraoperative Visualization of Blood Flow Patterns in Coronary Anastomoses. Journal of the American Society of Echocardiography, 2008, 21, 969-975.	2.8	13
67	Effect of the Cardiac Cycle on the Coronary Anastomosis Assessed by Ultrasound. Asian Cardiovascular and Thoracic Annals, 2007, 15, 86-90.	0.5	3
68	Blood Flow Imaging?A New Angle-Independent Ultrasound Modality for the Visualization of Flow in Atrial Septal Defects in Children. Echocardiography, 2007, 24, 975-981.	0.9	18
69	Real-time adaptive clutter rejection filtering in color flow imaging using power method iterations. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 1597-1608.	3.0	58